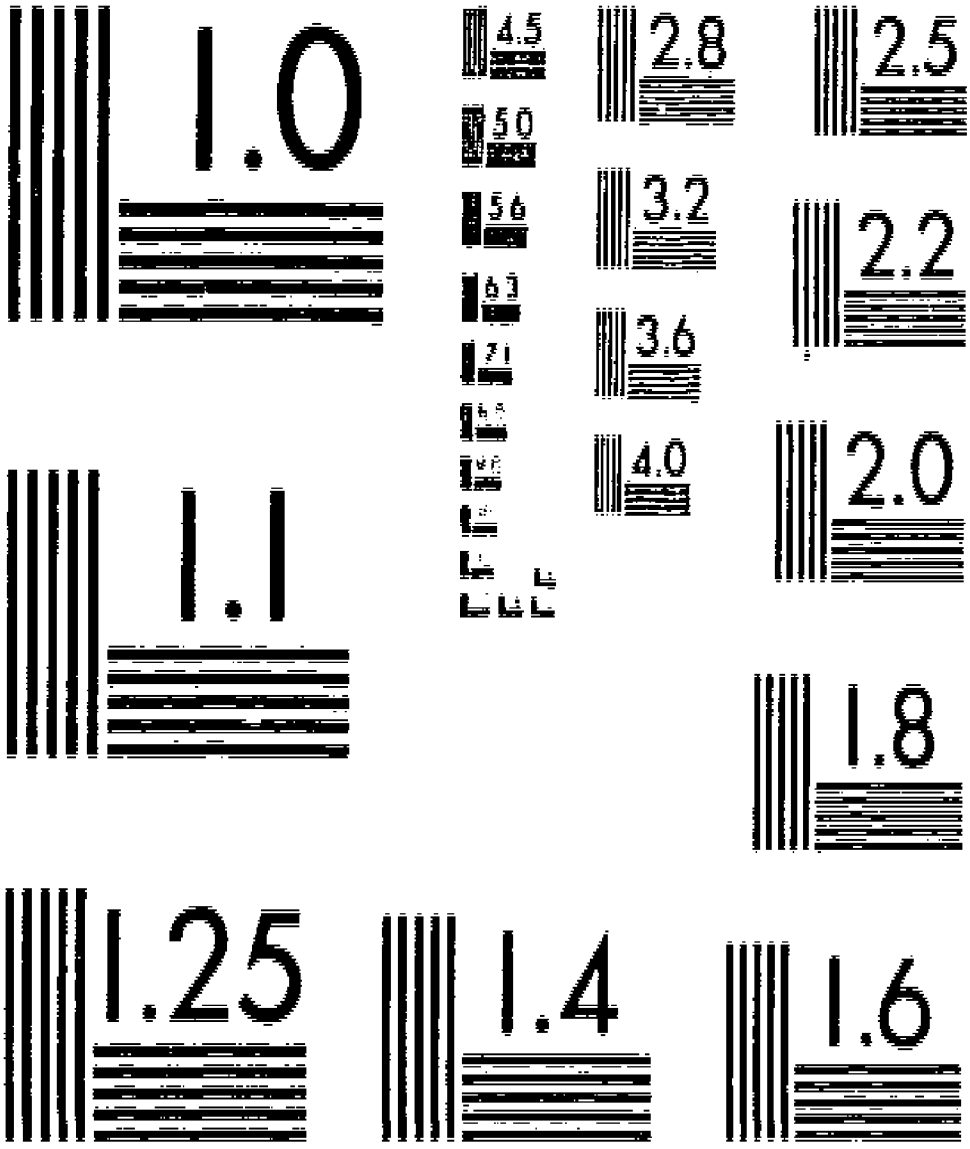


DOCUMENT RESUME

ED 061 051 SE 013 304

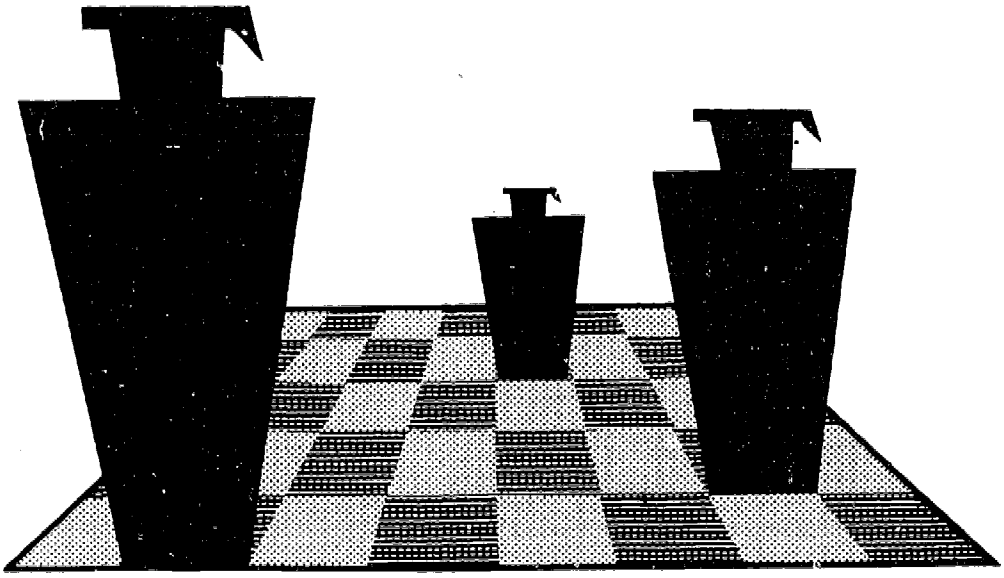
AUTHOR Alden, John D.
TITLE Engineering and Technology Graduates 1971.
INSTITUTION Engineers Joint Council, New York, N.Y. Engineering Manpower Commission.
PUB DATE Dec 71
NOTE 78p.
AVAILABLE FROM Engineers Joint Council, 345 East 47th Street, New York, New York 10017 ($5.00)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Degrees (Titles); Employment; Engineering Education; *Engineering Technicians; *Engineers; *Graduates; *Manpower Utilization; Professional Occupations; Salaries

ABSTRACT

This report gives a detailed picture of engineering and technology graduates for the 1970-71 academic year. Part I summarizes the placement status of engineering graduates at the bachelor's, mater's and doctor's levels, and technology graduates at the associate degree and bachelor's levels. Placement data are provided for graduates since 1958, including average starting salaries of new engineering graduates. The data in Part II consist of a listing, by colleges, of the number of 1970-71 engineering graduates for each degree level in the various areas of engineering. A similar listing is included for the technology degrees. (PR)

ENGINEERING AND TECHNOLOGY GRADUATES 1971



A REPORT BY THE

ENGINEERING MANPOWER COMMISSION
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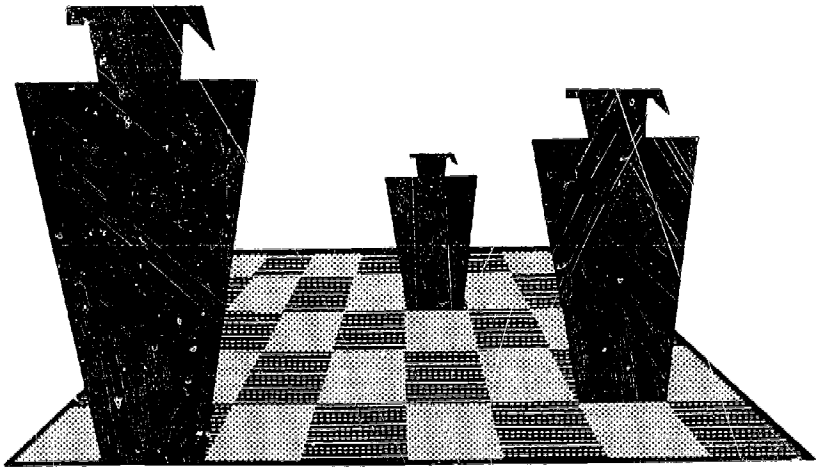
ENGINEERING AND TECHNOLOGY GRADUATES 1971



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DECEMBER 1971 **$5.00**

Engineers Joint Council

Engineers Joint Council (founded in 1941 and incorporated in 1958) is an organization of engineering societies whose general objective is to advance the art and science of engineering in the public interest.

In furtherance of this general objective the Council shall:

a) Provide for regular and orderly communications among its member societies.
b) Act as an advisory and coordinating agency for member society activities, as mutually agreed.
c) Organize and conduct forums for the consideration of problems of expressed concern to member societies.
d) Identify needs and opportunities for service in the engineering community and inform the concerned engineering institutions.
e) Recommend appropriate programs of studies and research to engineering institutions and especially to member societies.
f) Undertake, in accordance with policies mutually agreed to, specific activities or projects that the member societies acting individually could not accomplish as well.
g) Represent the member societies when they deem such joint representation desirable.

The Engineering Manpower Commission of Engineers Joint Council

The Engineering Manpower Commission was organized in 1951 as part of Engineers Joint Council, to serve as a focus for national technological manpower problems.

The Commission's program is carried out through the collection, analysis, and publication of significant data on engineering manpower, as well as the development of programs and policies designed to acquaint the public with the importance of engineering to the national welfare.

The Engineering Manpower Commission is charged with the following responsibility:

"To engage in studies and analyses of the supply, demand, and utilization of engineering and technical manpower; to make recommendations, conduct programs, and develop reports concerning these aspects of engineering and technical manpower; and to carry on such other programs in the field of manpower as may be authorized by the Board of Directors of EJC."

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William Hazell ..... *Chairman*
Walter M. Carleton ..... *Vice-Chairman*
Richard C. Fremon *Chairman, Surveys Committee*
John D. Alden ..... *Executive Secretary*

Acknowledgments

This study was conducted under the general supervision of John D. Alden, who also prepared the report. Carol Iceland carried out the survey, checked the degree returns, and did much of the data tabulation. Gail Goldberg typed the main data tables and assisted in tabulating and checking the data. Andrew Alden assisted in tabulating the placement and starting salary data. We especially thank the many Deans, Placement Directors, and other administrative personnel in the schools that responded to our surveys. Their cooperation in providing the source data is what makes these surveys a success.

Collection and publication of the degree data was made possible in large part by a grant from the General Electric Foundation, supplemented by the advance purchase of reports by a number of major employers of engineers, in addition to the commitment of Engineers Joint Council's own resources.

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Introduction

This report is a new departure in that it combines several surveys previously conducted and reported separately. Since all deal with the graduating class of engineers and technologists, it seemed logical to combine their data into a single convenient report.

The Engineering Manpower Commission has been surveying the placement status of the June graduating class of engineers since 1958. This survey was gradually expanded until it now includes engineering graduates at the bachelor's, master's, and doctor's levels, and technology graduates at the associate degree and bachelor's levels. Coverage of starting salaries for technology graduates was added in 1969.

In addition to placement information, we have gathered data on the number of graduates for the entire school year since 1966 in technology and since 1968 in engineering. These surveys were instituted to fill the gap left when the U.S. Office of Education ceased to publish special engineering enrollment and degree reports. The objective is to provide accurate and timely data for use by employers, educators, and others concerned with the supply of technical manpower.

This report is organized in three sections, Part One dealing with the placement survey, Part Two with engineering degrees, and Part Three with technology degrees. The entire report thus gives a complete picture of engineering and technology graduates for the school year ending in June 1971.

Part I. The Placement Status of Engineering and Technology Graduates—1971

Summary and Conclusions

Although 1971 was a year of layoffs and unemployment, new engineering graduates generally fared well in securing jobs or making other commitments, according to this year's placement survey. The fraction of graduates with no job offers or other plans ranged between two and nine percent this year for the different degree levels surveyed. While these figures are several times higher than those of previous years since 1965, they are not large in absolute terms. The percentages of graduates having other specific plans, or still considering job offers at the time of graduation were little changed from recent past years, with the exception of a few specific curricula or degree levels. However, there was a general increase in those entering military service as a result of the random sequence method of selecting men for induction. Among bachelor's degree engineering graduates, plans for advanced study were held by 20 percent, a moderate increase over last year. The popularity of additional study was also high among master's degree graduates, with 22 percent planning to continue full-time study. Among associate degree graduates, 29 percent were going on to further study, but for doctor's degree graduates in engineering and bachelor of technology graduates the figure was very small.

Salary figures for technology graduates, compared with engineering salary offers reported by the College Placement Council, Inc., indicate the following hierarchy of average monthly starting salaries in 1971:

Associate Degree in Technology	$ 632
Bachelor's Degree in Technology	$ 810
Bachelor's Degree in Engineering	$ 877
Master's Degree in Engineering	$1010
Doctor's Degree in Engineering	$1340

As a general rule, ECPD schools show higher mean salaries, a larger percentage of graduates going on to further study, and a smaller percentage without job offers than do other schools.

At all levels there are substantial differences among the various curricula in all statistics measured in this survey. Detailed figures are included in the tables throughout the report.

Bachelor's Degree Engineering Graduates

The engineering graduating class of 1971 enjoyed reasonably good employment prospects despite the general decrease in recruiting activity this year. Altogether, 88% of the graduates had definite commitments when they left school, while another three percent were still considering job offers. Nine percent had no job offers or other plans. (See Figure 1.) This percentage is substantially higher than in recent years, and was exceeded only in 1958, as shown in Table 1.

During the period that the Engineering Manpower Commission has conducted this survey, starting in 1958 (there was no survey in 1962 or 1963) the percentage of graduates going on to full-time study toward an advanced degree has shifted markedly, rising steadily to a peak at 26% in 1966, hesitating, then dropping rapidly to 16% in 1969 before returning to its present level. (See Figure 2.) The dramatic drop was undoubtedly caused by changes in the military draft, particularly the termination of graduate student deferments in the Fall of 1968. Conversely, the percentage employed or still considering job offers has risen as the popularity of graduate study has declined, reaching a high of 74% in 1969.

FIGURE 1

Placement Status of Bachelor's Degree Engineering Graduates—1971

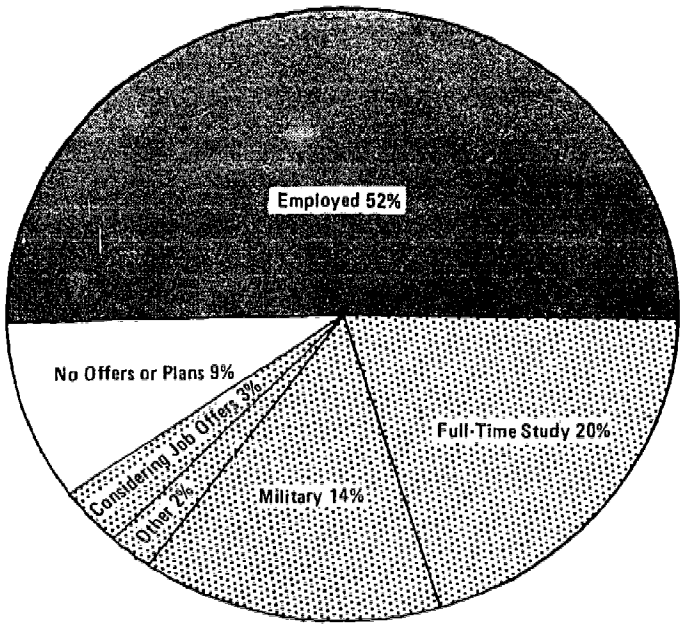


TABLE 1

Placement Status of Bachelor's Degree Engineering Graduates

1971 Compared with Previous Years

Placement Status	1958	1959	1960	1961	1964	1965	1966	1967	1968	1969	1970	1971
Employed**	59%	63%	62%	65%	59%	60%	54%	64%	68%	71%	64%	52%
Entering Graduate Studies**	10	11	10	14	17	25	26	25	18	16	17	20
Entering Military Service	9	8	8	11	9	8	7	9	11	9	11	14
Other Specific Plans	--	1	2	2	3	1	1	2	1	*	2	2
Graduates Committed (Total of Above)	79	83	82	92	88	87	85	98	96	96	92	88
Considering Job Offers	11	11	11	5	10	12	14	2	3	3	4	3
No Offers or Plans	10	6	7	3	2	1	*	*	*	*	4	9
Totals with Status Known	100	100	100	100	100	100	100	100	100	100	100	100

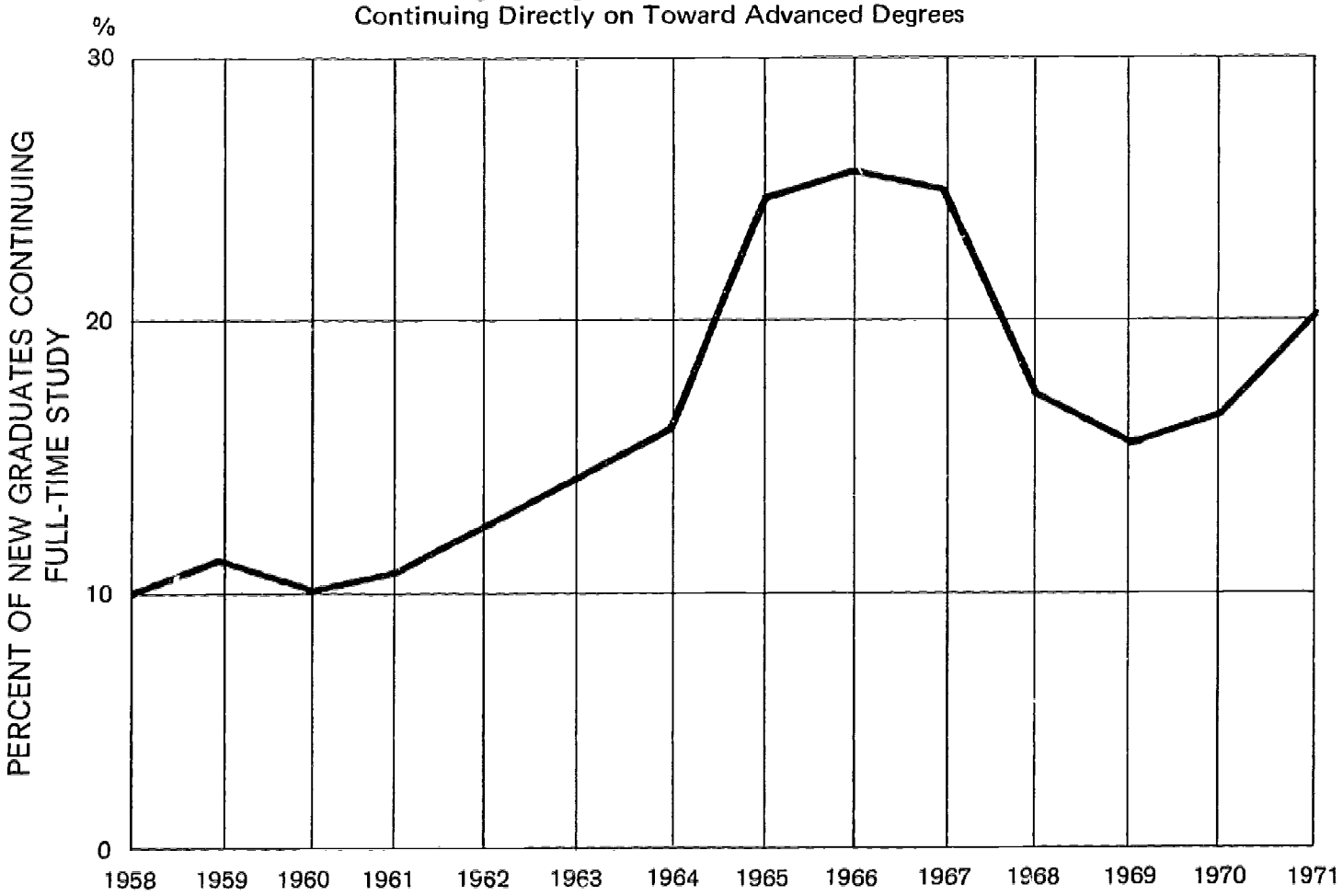
*Less than 1%

**For 1965 and later years, those employed and entering full-time graduate studies sponsored by employer are included in both categories. Totals for these years are therefore less than the sum of individual categories.

Note: Percentages may not add to totals because of rounding.

FIGURE 2

New Engineering Graduates at Bachelor's Level
Continuing Directly on Toward Advanced Degrees



Military service in recent years has taken, on the average, about ten percent of the graduates. The number actually drafted is undoubtedly larger than this because of calls received after the student has left school. This year more engineering graduates than ever entered military service because of the phasing out of occupational deferments announced in April 1970. The increased demands of the draft compensated in part for the reduced employment opportunities by taking men for whom jobs might not otherwise have been available.

The number still considering job offers, three percent, was about the same as in recent years. With jobs relatively scarce, most graduates were probably anxious to confirm their new positions without undue delay.

TABLE 2

Placement Status of Bachelor's Degree Engineering Graduates - 1971

ECPD Accredited and Non-Accredited Schools

Placement Status	All Schools No.	%	ECPD Accredited Schools No.	%	Non-Accredited Schools No.	%
Employed	9704	52	9269	52	435	65
Employed and Entering Full-Time Graduate Study	63	*	61	*	2	*
Entering Graduate Study	3667	20	3572	20	95	14
Entering Military Service	2681	14	2633	15	48	7
Other Specific Plans	349	2	336	2	13	2
Graduates Committed (Total of Above)	16464	88	15871	89	593	88
Considering Job Offers	507	3	481	3	26	4
No Offers or Plans	1695	9	1643	9	52	8
Total with Status Known	18666	100	17995	100	671	100
No Information	3351	--	3240	--	111	--
Total Reported	22017	--	21235	--	782	--

*Less than 1%

NOTE: Percentage may not add to totals because of rounding.

TABLE 3

Placement Status of Bachelor's Degree Graduates

by Engineering Curricula - 1971

Placement Status	Engineering Curriculum Aero.	Agr.	Arch.	Ceram.	Chem.	Civil	Elec. & Elex.	Eng. Gen.	Eng. Sci. Phys./Mech.
Employed**	38%	41%	65%	46%	44%	61%	51%	45%	32%
Entering Full-Time Graduate Study**	26	22	12	27	25	17	20	27	39
Entering Military Service	24	20	15	22	15	12	14	11	15
Other Specific Plans	2	9	2	2	2	2	2	8	4
Graduates Committed (Total of Above)	90	92	93	96	86	92	87	91	88
Considering Job Offers	2	4	6	0	3	2	3	2	2
No Offers or Plans	8	4	1	4	12	6	11	7	10

**Those employed and entering graduate studies sponsored by employer are included in both categories, but are counted only once in totals.
NOTE: Percentages are based on total with status known and may not add to totals because of rounding.

Table 2 compares schools having at least one engineering curriculum accredited by the Engineers' Council for Professional Development (ECPD) with other schools. Although the two groups are comparable in terms of graduates committed, the ECPD schools have a much higher percentage entering graduate study and a correspondingly lower percentage taking employment. Graduates of the non-ECPD schools were also less likely to be entering military service. Similar differences have existed in most surveys for previous years.

The placement findings for sixteen major curricula, are presented in Table 3. In comparing curricula, care must be taken to note the actual numbers of graduates involved. Percentages based on small numbers should be interpreted with caution.

All engineering curricula this year had a high percentage of graduates committed to specific plans, ranging from a low of 75% in naval architecture to a high of 96% in ceramic engineering. In both cases these percentages are based on a small number of graduates. There were, as usual, wide variations in the extent to which graduates of different curricula sought advanced degrees. Continued study was most popular among graduates in engineering sciences and nuclear engineering this year. The most employment-oriented curricula were petroleum, architectural, mining, and civil engineering. The highest percentages of graduates without offers or plans were in chemical and metallurgical engineering. Military service varied from a high of 25% in naval architecture to a low of nine percent in petroleum engineering.

Salaries offered to new bachelor's degree gradu-

TABLE 3 (Continued)

Placement Status of Bachelor's Degree Graduates

by Engineering Curricula - 1971

Engineering Curriculum									
Indus.	Mech.	Metal.	Min. & Geol.	Nav. Arch.	Nuc.	Petro.	All Others	Total	Placement Status
52%	56%	50%	63%	31%	47%	71%	55%	52%	Employed**
17	16	21	18	19	29	13	25	20	Entering Full-Time Graduate Study**
17	14	12	10	25	13	9	12	14	Entering Military Service
2	1	2	0	0	5	2	4	2	Other Specific Plans
87	87	85	91	75	94	94	95	88	Graduates Committed (Total of Above)
4	3	3	2	25	2	2	1	3	Considering Job Offers
9	10	12	7	0	4	4	4	9	No Offers or Plans

**Those employed and entering graduate studies sponsored by employer are included in both categories, but are counted only once in totals.
NOTE: Percentages are based on total with status known and may not add to totals because of rounding.

ates are shown in Table 4. Annual increases of two percent or less were registered in all engineering specialties this year. The percentage increases in all categories were noticeably lower than in previous years as a result of the softer employment market for engineers in 1970 and 1971. Curves showing trends since 1961 are presented in Figure 3. As in all previous years since 1966, chemical engineering salaries were the highest and civil engineering the lowest. Women engineers enjoyed salary offers comparable to the averages in all fields of engineering, and in fact showed the largest percentage gain over 1970 of any technical group. Graduates of co-operative work-study programs were offered salaries averaging about $16 per month higher than the norm for all engineering graduates.

TABLE 4

Starting Salaries of 1971 Graduates

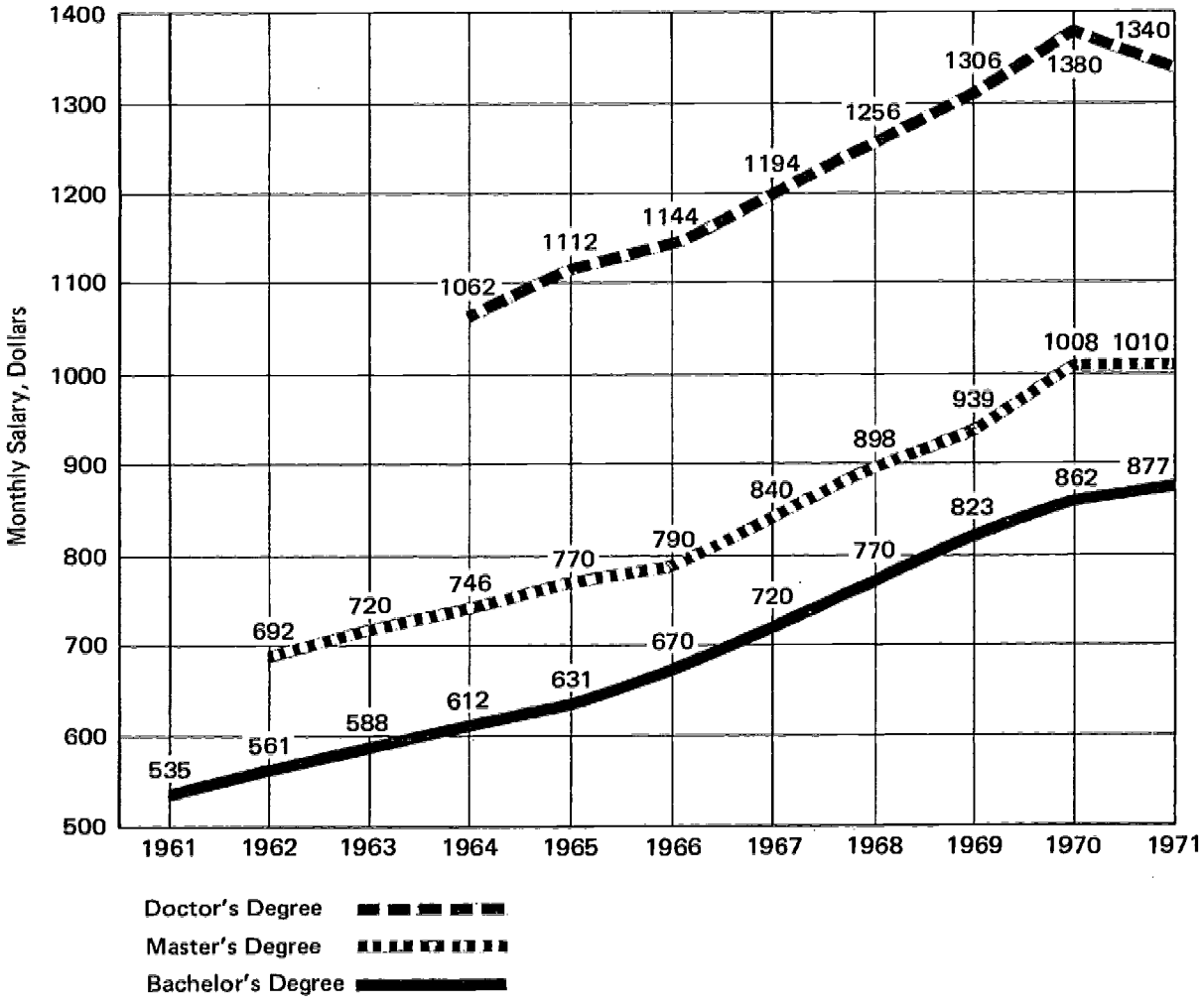
Bachelor's Degree Level

	All Graduates		CO-OP Programs	
Curriculum	Average Dollars Per Month	Percent Increase Over 1970	Average Dollars Per Month	Percent Increase Over 1970
Aeronautical Engineering	860	1.2	887	0.6
Chemical Engineering	920	2.0	931	0.6
Civil Engineering	850	1.6	867	2.4
Electrical Engineering	877	0.9	897	1.2
Industrial Engineering	866	2.0	871	0.5
Mechanical Engineering	881	1.6	887	-0.7
Metallurgical Engineering	888	1.7	897	1.2
Women, All Engineering Curricula	885	3.3	NA	NA
Physics, Chemistry, Mathematics	794	-1.9	838	-1.9
Non-Technical (Average)	761	-0.4	794	4.3

Source: The College Placement Council, Inc.

FIGURE 3

Average Starting Salaries
of New Engineering Graduates



Master's Degree Engineering Graduates

This was the second year in which placement statistics were compiled for advanced degree engineering graduates. (See Figure 4.) The results by curriculum are shown in Table 5. Comparative figures for both master's and doctor's are shown later in Table 8. Overall, the status of these graduates was even more favorable than those with bachelor's degrees. The employed category was divided into two parts to distinguish first-time employment from jobs previously held. Nearly a third of the master's degree graduates were returning to work for a previous employer, while 21% were continuing full-time study, apparently toward a doctorate. The proportion entering military service, eight percent, was less than among the bachelor's degree graduates. Only two percent were without job offers or other plans.

There were large differences among major curricula at this degree level also. Graduates in chemical engineering were noticeably more likely than others to continue their studies. Engineering science graduates (a small category) showed the highest and chemical engineers the lowest percentage returning to jobs previously held. Chemical engineering graduates had a higher than average percentage without offers or plans.

FIGURE 4

Placement Status of Master's Degree Engineering Graduates—1971

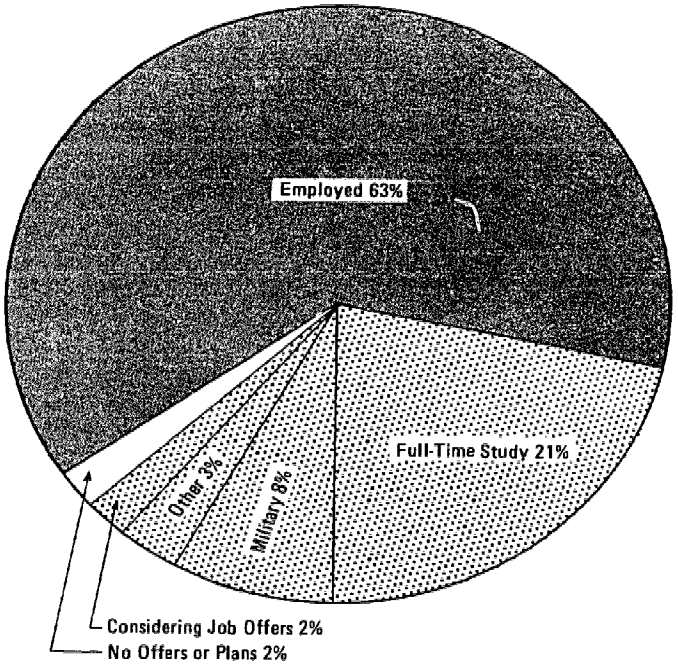


TABLE 5

Placement Status of Engineering Graduates by Curriculum - 1971

Master's Degree Programs

Placement Status	Chem.	Civil	Elec.	Eng. Sci.	Indust.	Mech.	Other	Total
Newly Employed	36%	45%	26%	16%	33%	33%	34%	32%
Returning to Job	9	18	40	60	35	24	36	31
Full-Time Study	36	20	21	18	14	24	16	21
Military Service	8	9	7	3	11	9	9	8
Other Specific Plans	5	3	3	2	2	4	2	3
Graduates Committed (Total of Above)	94	95	96	99	95	95	97	96
Considering Job Offers	2	3	2	0	5	2	2	2
No Offers or Plans	4	3	2	*	*	3	1	2

*Less than 1%.
NOTE: Percentages are based on total with status known and may not add to totals because of rounding.

Table 6 gives the comparison between ECPD and other schools. This year there was little difference between the two groups in the percentage going on to full-time study. Although the non-ECPD schools provided relatively few master's degrees, their graduates appeared more likely to have definite commitments and a particularly high percentage were returning to jobs previously held.

Starting salaries for master's degree graduates are shown in Table 7. Here again chemical engineering was highest and civil engineering lowest among the engineering specialties--note however that the highest offers of all went to those with a master's in business administration or industrial management on top of a technical undergraduate degree.

Compared with 1970, salary offers were up very little or, in several curricula, were actually lower. Although this would indicate a decreased demand for master's degree engineering graduates, such a conclusion is not borne out by the other placement statistics obtained in this survey.

TABLE 6

Placement Status of Master's Degree Engineering Graduates - 1971

ECPD Accredited and Non-Accredited Schools

Placement Status	All Schools No.	%	ECPD Schools No.	%	Non-ECPD Schools No.	%
Newly Employed	1617	32	1594	33	23	14
Returning to Job	1540	31	1440	30	100	60
Full-Time Study	1060	21	1023	21	37	22
Military Service	407	8	406	8	1	*
Other Specific Plans	151	3	146	3	5	3
Graduates Committed (Total of Above)	4775	96	4609	95	166	99
Considering Job Offers	116	2	116	2	0	0
No Offers or Plans	102	2	101	2	1	*
Total with Status Known	4993	100	4826	100	167	100
No Information	439	--	431	--	8	--
Total Reported	5432	--	5257	--	175	--

NOTE: Percentages may not add to totals because of rounding.

TABLE 7

Starting Salaries of 1971 Graduates

Master's Degree Level

Curriculum	Average Dollars Per Month	Percent Increase Over 1970
Chemical Engineering	1054	1.7
Civil Engineering	978	1.9
Electrical Engineering	1018	0.3
Industrial Engineering	1004	-1.0
Mechanical Engineering	1019	1.1
Metallurgy	988	-3.0
Business Administration, Management*	1111	-0.1

*After technical undergraduate degree.

Source: The College Placement Council, Inc.

TABLE 8

Placement Status of Master's and Doctor's Degree Engineering Graduates - 1971 Compared with Previous Years

	Master's Degree		Doctor's Degree	
Placement Status	1970	1971	1970	1971
Newly Employed	38%	32%	68%	74%
Returning to Job	24	31	10	10
Full-Time Study	19	21	4	3
Military Service	9	8	3	3
Other Specific Plans	4	3	4	4
Graduates Committed (Total of Above)	94	96	89	94
Considering Job Offers	3	2	3	3
No Offers or Plans	4	2	8	4
Total with Status Known	100	100	100	100

Note: Percentages may not add to totals because of rounding.

TABLE 9

Placement Status of Engineering Graduates by Curriculum - 1971

Doctor's Degree Programs

Placement Status	Chem.	Civil	Elec.	Eng. Sci.	Indust.	Mech.	Other	Total
Newly Employed	73%	75%	76%	70%	74%	69%	79%	74%
Returning to Job	9	10	11	12	19	10	8	10
Full-Time Study	5	2	3	2	0	3	*	3
Military Service	2	3	2	5	5	4	4	3
Other Specific Plans	5	6	2	2	0	4	4	4
Graduates Committed (Total of Above)	94	95	94	91	98	91	95	94
Considering Job Offers	2	3	3	0	2	1	2	3
No Offers or Plans	4	2	2	9	0	7	4	4

Note: Percentages are based on total with status known and may not add to totals because of rounding.

Doctor's Degree Engineering Graduates

As with the master's degrees, this year marked the second time doctor's degree graduates were covered by the EMC placement survey. (See Figure 5.) Comparative results are presented in Table 8. If anything, this year's graduates appear to have been more successful than last year's in finding employment.

Overall, 87% were employed or considering job offers, three percent were continuing full-time study and three percent entering military service. Only four percent were without job offers or other plans. This is a little higher than the master's degree graduates but lower than the bachelor's degree group.

Among the individual curricula shown in Table 9, chemical engineering graduates had the highest percentage continuing post-doctoral study. The engineering science and mechanical groups showed the largest percentages without job offers or other plans. Practically all of the doctor's degrees reported for this survey were awarded by schools on the ECPD list, so a comparison of ECPD versus other schools would be meaningless.

Starting salary offers for engineering doctorates are shown in Table 10. Here chemical engineering

FIGURE 5

Placement Status of Doctor's Degree Engineering Graduates—1971

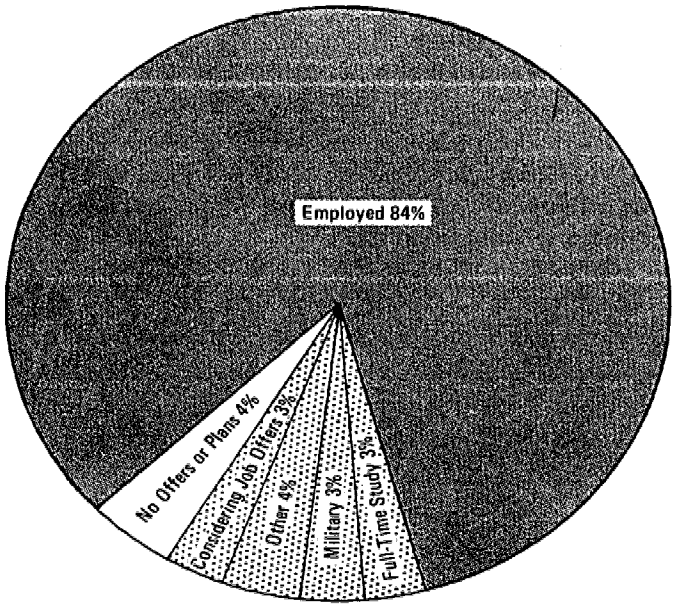


TABLE 10

Starting Salaries of 1971 Graduates

Doctor's Degree Level

Curriculum	Average Dollars Per Month	Percent Increase Over 1970
Chemical Engineering	1395	1.5
Civil Engineering	1102	-10.8
Electrical Engineering	1389	-2.9
Mechanical Engineering	1278	-6.7
Metallurgy	1314	-1.4

Source: The College Placement Council, Inc.

has taken the lead since last year, with civil engineering still the lowest. Except in chemical engineering, salaries were lower than in 1970. Despite this evidence of decreased demand, only a small percentage of the doctor's degree graduates were without jobs or other plans at the time of graduation.

Two-Year Associate Degree Technology Graduates

The Engineering Manpower Commission has been surveying the placement status of technology graduates since 1967. These schools have traditionally graduated technicians at the two-year associate degree level, but in recent years many have established four-year programs as well. These are covered later in this report. Although the two-year technician programs are normally intended to be terminal in nature, preparing their graduates for immediate employment, the EMC surveys have shown that many students are continuing on toward a bachelor's degree after obtaining the associate degree.

The 1971 placement survey obtained data from 50 schools covering 3,850 graduates at the associate degree level. The results are summarized in Figure 6. Table 11 shows how the 1971 statistics compare with earlier years. The high percentage continuing in full-time study is noteworthy. The 1969

FIGURE 6

Placement Status of Associate Degree Technology Graduates—1971

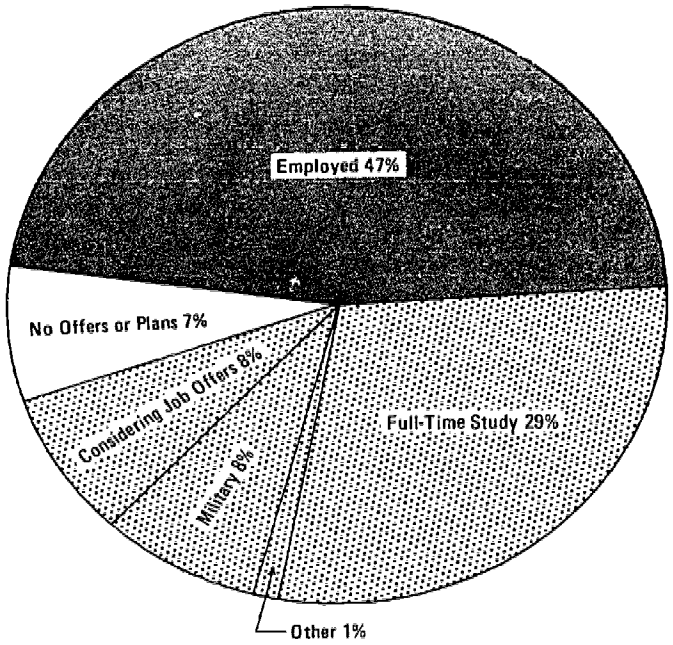


TABLE 11

Placement Status of Associate Degree Technology Graduates

1971 Compared With Previous Years

Placement Status	1967	1968	1969	1970	1971
Employed	63%	54%	63%	56%	47%
Full-Time Study	15**	30	23	28	29
Military Service	7	7	6	7	8
Other Specific Plans	10	1	1	*	1
Graduated Committed (Total of Above)	95	93	94	91	85
Considering Job Offers	4	7	6	5	8
No Offers or Plans	1	*	*	4	7
Total with Status Known	100	100	100	100	100

*Less than 1%.

**In the 1967 survey the category of full-time study was not specifically included in the questionnaire, but was written in by some respondents and included in "other specific plans" by others. The true proportion going on to full-time study was probably about 24% for associate degree graduates.

NOTE: Percentages may not add to totals because of rounding.

figures, however, included an unusually large number of returns from non-ECPD schools, which accounts for the relatively small percentage entering full-time study that year. Trends from year to year can be derived from these statistics only on an approximate basis because of differences in survey coverage each year. This year the percentage without job offers or plans was the highest of the five years surveyed, but about the same as for engineering graduates as shown earlier in this report.

Table 12 shows the results for 1971 broken down by curriculum and indicates the great variety in placement patterns among technical school graduates. The percentage employed ranged from 88% in air conditioning technology to 38% in chemical technology, while full-time study varied from 8% in air conditioning to 46% in industrial technology. The surprisingly high percentage of chemical technology graduates without job offers or other plans, although based on a small number of graduates reported this year, is consistent with the findings for chemical engineering graduates in indicating reduced employment prospects in the chemical industry this year.

The effect of ECPD accreditation is shown in Table 13. As in the engineering schools, ECPD listing identified a group of schools whose graduates were nearly twice as likely to continue their education. This was reflected in a correspondingly smaller percentage employed. In other activities also there were marked differences between the two sets of schools, with the ECPD schools generally showing better prospects for their new graduates.

TABLE 12

Placement Status of Technology Graduates by Curriculum - 1971

Associate Degree Programs

Placement Status	Aero.	Air Cond.	Auto.	Chem.	Civil	Com-puter	Draft-ing
Employed	45%	88%	50%	38%	49%	50%	41%
Full-Time Study	34	8	26	31	36	30	37
Military Service	9	0	17	0	6	5	11
Other Specific Plans	2	0	0	2	1	1	0
Graduates Committed (Total of Above)	90	96	93	71	92	86	90
Considering Job Offers	7	4	2	5	4	9	6
No Offers or Plans	3	0	5	25	4	5	4

*Less than 1%

NOTE: Percentages are based on total with status known and may not add to totals because of rounding.

TABLE 13

Placement Status of Two-Year Technology Graduates - 1971

ECPD-Accredited and Non-Accredited Schools

Placement Status	All Schools No.	%	ECPD Schools No.	%	Non-ECPD Schools No.	%
Employed	1606	47	769	44	837	50
Full-Time Study	1005	29	666	38	339	20
Military Service	263	8	146	8	117	7
Other Specific Plans	41	1	30	2	11	*
Graduates Committed (Total of Above)	2915	85	1611	91	1304	78
Considering Job Offers	271	8	75	4	196	12
No Offers or Plans	239	7	80	5	159	10
Total with Status Known	3425	100	1766	100	1659	100
No Information	425	--	271	--	154	--
Total Reported	3850	--	2037	--	1813	--

*Less than 1%.

NOTE: Percentages may not add to totals because of rounding.

TABLE 12 (Cont.)

Placement Status of Technology Graduates by Curriculum - 1971

Associate Degree Programs

Elec-trical	Elec-tronics	Indust. Tech.	Mfg.	Mech.	Other	Total	
41	46	41	62	49	46	47	Employed
30	26	46	10	33	23	29	Full-Time Study
8	9	4	9	6	9	8	Military Service
*	2	0	2	1	*	1	Other Specific Plans
78	84	91	83	89	78	85	Graduates Committed (Total of Above)
8	8	7	8	7	18	8	Considering Job Offers
14	8	2	9	4	4	7	No Offers or Plans

*Less than 1%.

NOTE: Percentages are based on total with status known and may not add to totals because of rounding.

Salary offers to 1971 technology graduates, as surveyed by EMC, are shown in Table 14. Because of the way data were collected it was not possible to compute fractiles. An approximate distribution is shown in the form of minimum, average, and maximum salaries. The minimum and maximum are the lowest and highest salaries reported by any responding school for the curriculum under consideration and thus represent the extreme limits. Mean figures are given for ECPD schools, non-ECPD schools, and all schools combined. The columns headed AVG. LOW and AVG. HIGH are simply arithmetical averages of the minimum and maximum salary offers reported by all schools in a given curriculum category. Although such averages have no particular statistical significance, they help give an idea of the practical upper and lower limits on the range of salaries available to technical school graduates.

The overall mean salary reported was $632, with a very wide spread between the extreme high and low. Most offers fell within the range of $542 to $731 per month.

Graduates from ECPD schools tended to receive slightly higher salaries than those from other institutions. For all curricula combined the differential was $14 per month or about two percent. Similar differentials existed in almost all individual curricula. For the ECPD schools, the best-paid specialties were automotive, electronics, chemical, and "other" technology; aerospace, civil. and drafting were the lowest. Among the non-ECPD schools electrical and chemical technology led, while automotive and architectural stood lowest on the salary scale. In view of the small number of schools reporting some curricula, too much emphasis should not be placed on differences disclosed by this survey. It is probable that local factors have a great deal to do with the salaries offered to graduates from particular curricula at particular schools, while the great range of salaries reported, in many cases from the same school, supports the belief that individual factors are also quite important, especially in establishing the extreme high and low salaries reported.

Figure 7 shows how starting salaries have changed over the years.

TABLE 14

Monthly Starting Salaries of 1971 Technology Graduates

Associate Degree Level

Curriculum	No. of Schools	No. of Salaries	Mini-mum	Avg. Low*	Mean Non-ECPD Schools**	Overall Mean	Mean ECPD Schools**	Avg. High***	Maxi-mum
Aerospace	2	4	530	--	--	581	581	--	624
Air Conditioning	3	15	575	--	--	642	642	--	875
Architectural	6	40	400	523	559	595	654	679	850
Automotive	4	19	303	480	511	553	750	631	800
Chemical	6	44	320	549	651	660	663	776	1017
Civil	15	162	418	526	604	598	597	694	850
Computer	7	64	400	523	635	624	613	718	833
Drafting	7	337	320	495	612	596	595	689	950
Electrical	17	484	465	594	657	653	653	843	1600
Electronic	24	288	333	550	637	652	667	755	850
Manufacturing	8	53	433	548	623	647	652	719	825
Mechanical	25	186	381	571	601	635	654	734	963
Other	11	62	375	596	616	687	743	805	1100
All Curricula	39	1758	303	542	623	632	637	731	1600

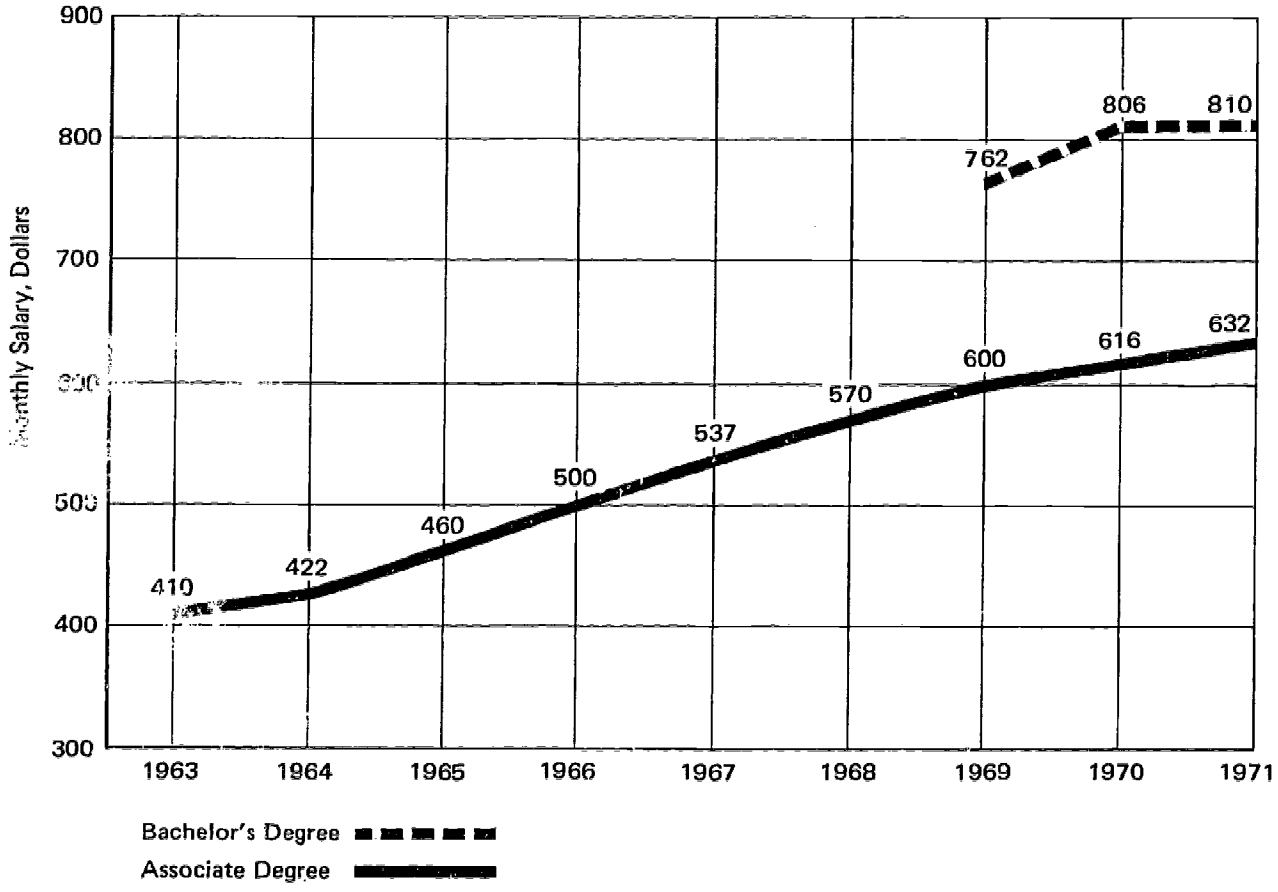
*Mean of the lowest figures reported by responding schools.

**ECPD schools are those having at least one engineering technology curriculum accredited by ECPD. Specific curricula for these schools may or may not be accredited. There were 21 ECPD schools and 18 others in the total of 39 included in this table.

***Mean of the highest figures reported by responding schools.

FIGURE 7

Average Starting Salaries
of New Technology Graduates



Four-Year Bachelor's Degree Technology Graduates

For the growing bachelor of technology programs, placement statistics on 1,176 graduates as reported by 18 schools are summarized in Figure 8. Table 15 shows how the placement status of this group has varied since the EMC surveys were started in 1967. Although the statistics tend to confirm a softening in the employment market for 1971, there have been so many differences in the survey coverage from year to year that caution must be used in drawing conclusions from these figures. In general the bachelor of technology graduates do not seem to have fared quite as well as their fellows in engineering.

Detailed placement statistics are shown in Table 16 broken down by major curriculum groups. In comparison with other degree levels described in this report, the bachelors of technology were more employment-oriented and much less disposed to continue full-time study. The percentage without job offers or plans varied considerably from curriculum to curriculum as did the percent still considering job offers. Industrial technology had the highest percentage of graduates committed and civil engineering technology the lowest. Military service took between 10% and 17% of the graduates in the different curricula.

FIGURE 8

Placement Status of Bachelor's Degree Technology Graduates—1971

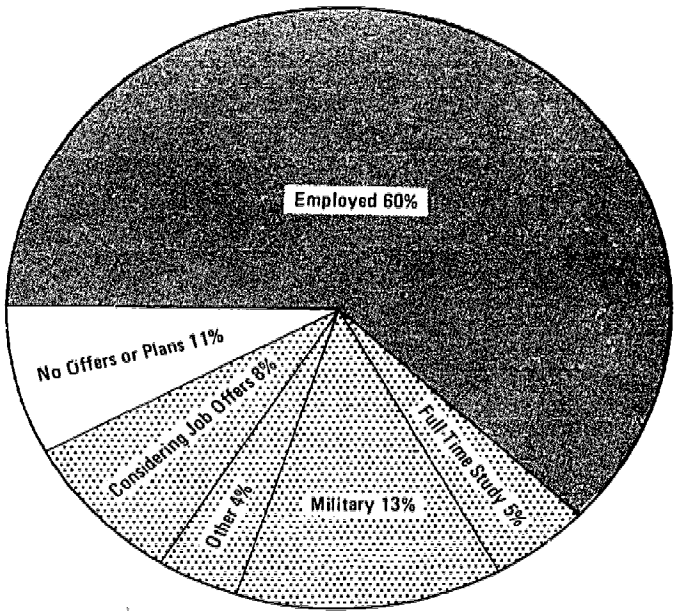


TABLE 15

Placement Status of Bachelor's Degree Technology Graduates

1971 Compared With Previous Years

Placement Status	1967	1968	1969	1970	1971
Employed	70%	75%	72%	69%	60%
Full-Time Study**	10	4	7	4	5
Military Service	11	13	12	9	13
Other Specific Plans	3	2	*	2	4
Graduates Committed (Total of Above)	93	94	91	84	81
Considering Job Offers	6	5	8	11	8
No Offers or Plans	1	*	*	5	11
Total with Status Known	100	100	100	100	100

*Less than 1%.

**Because of differences in the survey methodology, data for the different years are not strictly comparable and indicate general trends only. In the 1967 survey the category of full-time study was not specifically included in the questionnaire, but was written in by some respondents and included in "other specific plans" by others.

NOTE: Percentages may not add to totals because of rounding.

The breakdown between ECPD and other schools, given in Table 17, shows that the two groups differ in several particulars. Because of the small number of schools reporting, regional factors may account for some of the apparent differences between the two groups as well as changes from year to year. Graduates of the ECPD schools were less likely to be employed because of high percentages entering military service or having other specific plans. At the same time a smaller percentage was without job offers or other plans.

TABLE 16

Placement Status of Technology Graduates by Curriculum - 1971

Bachelor's Degree Programs

Placement Status	Civil	Elec.	Indust.	Mech.	Other	Total
Employed	57%	65%	71%	57%	45%	60%
Full-Time Study	3	5	3	6	5	5
Military Service	14	13	17	12	10	13
Other Specific Plans	2	2	0	1	18	4
Graduates Committed (Total of Above)	76	85	91	76	78	81
Considering Job Offers	19	5	5	9	6	8
No Offers or Plans	5	10	4	15	16	11

NOTE: Percentages are based on total with status known and may not add to totals because of rounding.

TABLE 17

Placement Status of Bachelor's Degree Technology Graduates - 1971

ECPD Accredited and Non-Accredited Schools

Placement Status	All Schools No.	%	ECPD Schools No.	%	Non-ECPD Schools No.	%
Employed	537	60	263	51	274	64
Full-Time Study	42	5	23	5	19	4
Military Service	115	13	64	17	51	12
Other Specific Plans	35	4	32	7	3	*
Graduates Committed (Total of Above)	729	81	382	81	347	81
Considering Job Offers	73	8	41	9	32	7
No Offers or Plans	96	11	46	10	50	12
Total with Status Known	898	100	469	100	429	100
No Information	278	--	112	--	166	--
Total Reported	1176	--	581	--	595	--

*Less than 1%.

NOTE: Percentages may not add to totals because of rounding.

In comparison with the two-year technology graduates the average for bachelors of technology was higher by $178 per month or 28%. In comparison with bachelor's degree graduates in engineering, the technology graduates had salaries about eight percent lower, and well ahead of the average for non-technical curricula.

Salary offers to these graduates averaged $810 per month, with most of them falling within the range of $607 to $1080. Detailed figures for all curricula are given in Table 18. The mean values ranged from a high of $873 in civil technology to a low of $769 in industrial technology. There was little difference between the averages for ECPD schools and other schools, but the upper and lower limits tended to vary considerably from one group to another because of the relatively small number of schools in any one category.

TABLE 18

Monthly Starting Salaries of 1971 Technology Graduates

Bachelor's Degree Level

Curriculum	No. of Schools	No. of Salaries	Mini-mum	Avg. Low*	Mean	Avg. High**	Maxi-mum
Aerospace	3	35	644	730	797	842	850
Civil	6	67	600	691	873	1001	1250
Computer	2	24	667	696	775	918	960
Electrical	6	96	608	756	785	880	1000
Electronic	6	35	588	704	820	904	1170
Industrial Tech.	3	56	500	550	769	975	1050
Manufacturing	3	32	600	733	845	936	1050
Mechanical	7	101	650	708	825	938	1300
Other	4	34	680	---	824	---	950
Total	16	480	500	607	810	1080	1300
ECPD Schools	8	233	588	678	819	968	1170
Non-ECPD Schools	8	247	500	631	802	1028	1300

*Mean of the lowest figures reported by responding schools.
**Mean of the highest figures reported by responding schools.

Analysis of "No Information" Reports

Every year schools report a considerable number of graduates for whom no placement information is available. The existence of a "no information" group always tends to cloud the findings of a survey, and thus warrants careful analysis. Table 19 shows how this category appeared in the various degree levels covered by the 1971 EMC placement survey.

There is good reason to believe that students who do not contact their college placement offices already have jobs or other firm plans and therefore do not need placement assistance. However, since this assumption cannot be proven, we prefer to base our statistics on the total of graduates for whom specific placement information is reported. This year we deliberately excluded data from schools having high percentages of "no information" in order to minimize the area of uncertainty. Data from military, maritime, and a few other highly specialized institutions were, as usual, excluded in order to avoid distorting the statistics.

The fairly high percentage of "no information" should be a matter of concern to placement officers and educators, as it seems to indicate a loss of contact between students and their placement offices and casts doubt on the validity of statistics derived from placement surveys. This is a loss to educators and the engineering community alike, as our placement surveys have been extremely useful in providing statistics and identifying trends well in advance of other indicators.

TABLE 19

Analysis of "No Information" Reports

	Total Graduates Reported	No Information No.	%
Engineering Degrees, BS	22017	3351	15
ECPD Schools	21235	3240	15
Other Schools	782	111	14
Engineering Degrees, MS	5432	439	8
ECPD Schools	5257	431	8
Other Schools	175	8	5
Engineering Degrees, PhD	1427	83	6
Techology Degrees, BS	1176	278	24
ECPD Schools	581	112	19
Other Schools	595	166	28
Technology Degrees, AS	3850	425	11
ECPD Schools	2037	271	13
Other Schools	1813	154	9

Part II. Engineering Degrees—1970-71

The 1970-71 Survey

There were 43,167 bachelor's degrees in engineering earned during the school year ending in June 1971, according to this year's survey conducted by the Engineering Manpower Commission of Engineers Joint Council. This was about 200 more than recorded in 1969-70 and substantially more than had been anticipated on the basis of enrollments in previous years. There are, however, strong indications that future graduating classes will be smaller for the next four years or more.

The numbers of advanced degrees reported were 15,889 master's; 494 engineer degrees; and 3,640 doctor's. For all three levels combined the increase over last year totaled about 850.

For the 1970-71 survey, data were received from 277 schools. Bachelor's degrees were reported by 273 institutions, master's by 201, engineer degrees by 20, and doctor's by 136. Three schools reported advanced degrees only—Rensselaer at Hartford, University of North Carolina at Chapel

Table 20

Engineering Degrees, All U.S. Institutions, 1949-71

Year Ended June 30	*Bachelor's*[1]	*Master's*[2]	*Doctor's*
1971[3]	43,167	16,383	3,640
1970[3]	42,966	15,548	3,620
1969[3]	39,972	14,980	3,345
1968[3]	38,002	15,152	2,933
1967	36,186	13,887	2,614
1966	35,815	13,677	2,303
1965	36,691	12,056	2,124
1964	35,226	10,827	1,693
1963	33,458	9,635	1,378
1962	34,735	8,909	1,207
1961	35,860	8,177	943
1960	37,808	7,159	786
1959	38,134	6,753	714
1958	35,332	5,788	647
1957	31,211	5,232	596
1956	26,306	4,724	610
1955	22,589	4,484	599
1954	22,236	4,177	590
1953	24,164	3,743	592
1952	30,286	4,141	586
1951	41,893	5,156	586
1950	52,732	4,904	494
1949	45,200	4,798	417

[1] Includes four-year and five-year curricula.

[2] Includes other post-baccalaureate, pre-doctoral degrees: 508 in 1970, 494 in 1971.

[3] Data since 1968 from Engineering Manpower Commission; for earlier years, from U.S. Office of Education.

Hill, and the Institute of Paper Chemistry at Lawrence University. 208 of the schools had at least one curriculum accredited by Engineers' Council for Professional Development as of the 1970 annual report, but at four of these institutions only master's degree curricula were accredited.

Schools added to the survey since 1970 were Chicago Technical College and Detroit Institute of Technology. Those deleted were St. Louis University and Washington and Lee University, both of which reported having no engineering graduates this year.

Trend Since 1949

Table 20 gives the number of degrees for all schools from 1949 to date. Data for 1949 through 1967 are from the U.S. Office of Education annual reports for those years, while figures from 1968 to date were compiled directly by the Engineering Manpower Commission. The two series differ slightly in survey methodology and in criteria for classifying degrees, but these differences do not appear to be important in terms of total numbers.

The EMC survey asks for engineering degrees only, is addressed to the dean of engineering, and returns in most cases are verified by both the dean and the registrar. All schools surveyed in 1971 provided data, so there are no EMC estimates in any of the figures reported for this year.

Degrees Not Counted as Engineering

As usual in these surveys several schools reported degrees given by the engineering school that do not appear to be engineering degrees in the usually accepted sense. Those that were excluded from the totals in this report are listed in Table 21.

Table 21

Degrees Not Counted As Engineering, 1970-71

School	*Curriculum*	*Bach.*	*Master*	*Doctor*
Heald Engrg Coll	Architecture	1	—	—
Stanford U	Architecture	—	12	—
U of Illinois, Urbana	Physics	—	81	50
U of Notre Dame	Architecture	39	2	—
Iowa St U	Architecture	79	—	—
U of Maine	Pulp and Paper Technology*	1	1	—
Boston U	Aero Technology*	2	—	—
Lawrence Inst of Tech	Chemistry	2	—	—
	Physics	1	—	—
	Mathematics	1	—	—
	Industrial Management	184	—	—
	Architecture	55	—	—
U of Michigan	Meteorology and Oceanog	18	—	—
Washington U	Physics	8	—	—
Montana St U	Construction Technology*	21	—	—
	Mechanical Technology*	19	—	—
New York U	Industrial Chemistry	—	1	—
	Mathematics	12	24	1
	Meteorology	—	13	2
	Oceanography	—	6	2
	Meteorology and Oceanog	13	—	—
	Physics	3	—	—
North Carolina St U	Furniture Mfg and Mgt*	13	—	—
U of Oklahoma	Meteorology	8	9	2
Oklahoma St U	Architecture	29	—	—
U of Tulsa	Earch Sciences	6	5	—
Brown U	Urban Technology*	6	—	—
Texas A&M U	Engineering Technology*	5	—	—
	Industrial Distribution*	11	—	—
	Industrial Technology*	78	—	—
	Marine Transportation	23	—	—
Washington St U	Architecture	59	—	—

*Recorded as bachelor of technology degrees elsewhere in this report.

Table 22

Engineering Degrees by Curriculum and Degree Level for All U.S. Engineering Schools, 1970-71

Curriculum	*Bachelor's*	*Master's*	*Engineer*	*Doctor's*
Electrical	12,145	4,254	105	899
Mechanical	8,966	2,318	41	479
Civil	6,604	2,456	61	458
Chemical	3,626	1,086	9	395
Industrial	2,774	1,156	79	121
Aerospace	2,436	724	20	198
Engineering, General	1,907	429	22	114
Engineering Science	699	235	100	50
Metallurgical	630	329	4	162
Marine	477	88	27	17
Agricultural	412	132	0	53
Petroleum	277	96	2	19
Engineering Physics	237	60	0	35
Nuclear	225	323	8	115
Management	203	599	0	6
Ceramic	191	45	0	37
Architectural	186	21	0	0
Computer	174	250	0	44
Engineering Mathematics	152	119	0	31
Engineering Mechanics	147	247	5	154
Systems	141	455	0	71
Mining	138	29	7	8
Geological	130	47	3	17
Materials	108	113	0	89
Textile	52	12	0	1
Environmental	51	180	1	37
Biomedical	37	77	0	29
Geophysical	24	9	0	1
Other	18	0	0	0
Total	43,167	15,889	494	3,640

Results by Curriculum

Table 22 gives the breakdown by curriculum and degree level for 28 separate curriculum groupings and a small residual "other" category. Data for these same groups are reported school by school later in this report. Related curriculum titles included under each group are as follows:

Electrical—includes Communications, Electric Power, Electronic, Wave Propagation and Radiation

Mechanical—includes Energy, Thermomechanical

Civil—includes Building Construction and Design, Construction, Soil, Structural, Transportation, Urban Systems

Chemical

Industrial—includes Industrial Design, Manufacturing, Tool

Aerospace—includes Aeronautical, Aircraft Maintenance, Astronautical

Engineering, General—includes College Program, Engrg Analysis, Engrg Design, Engrg Graphics, Engrg Operations, Engrg Systems, Interdisciplinary, Special Grad Program in Engrg

Engineering Sciences—includes Applied Sciences

Metallurgical

Marine—includes Naval Architecture, Ocean

Agricultural

Petroleum—includes Gas, Natural Gas

Nuclear

Engineering Physics—includes Applied Physics, Thermal Science

Ceramic—includes Ceramic Science

Architectural

Management—includes Administrative, Engrg Administration, Engrg Economic Systems

Computer—includes Computer Science

Engineering Mathematics—includes Applied Mathematics

Engineering Mechanics—includes Applied Mechanics, Mechanical Science, Mechanics, Structural Mechanics

Systems—includes Operations Research

Mining—includes Mineral Economics

Geological—includes Engrg Geoscience, Mineral

Materials—includes Macromolecular, Polymeric Materials

Environmental—includes Hydrology, Resources, Sanitary, Water Resources

Textile

Biomedical

Geophysical

Other—the following are listed under "Other" in Table 22: Fire Protection, Paper, Sugar Engineering. Additional curricula listed under "Other" in Tables 23 through 26 have been added to the totals for the groups indicated in Table 22, as follows: Control Systems (added to Electrical); Surveying and Photogrammetry (added to Civil); Reliability (added to Industrial); Educational Spec in Engrg (added to General); Optics, Engrg Acoustics (added to Engrg Sciences); Welding (added to Metallurgical); Mineral Dressing (added to Mining); Solids and Fluids (added to Materials); Air Pollution, Atmospheric Resources (added to Environmental).

Results by School

The complete breakdown of degrees granted by school, curriculum, and degree level is given in Tables 23 through 26. The system used in these tables differs from that previously used, and was adopted as a means of reporting both major and

minor curricula without using excessive space. Tables 23, 24 and 26 (which are for bachelor's master's, and doctor's degrees respectively) have been separated into parts A and B. Part A has columns for 12 major curricula, all other curricula, total number of degrees for the school, and numbers awarded to women, foreign students, and U.S. Negroes. Part B has columns for 16 additional curricula. Footnotes at the end of each table identify minor curricula included under related column headings. Table 25 for engineer degrees is not broken into two parts because of the small number of schools involved. Instead, all minor curricula are identified in the footnotes.

Purdue University produced the largest number of bachelor's degrees, followed by Missouri at Rolla. 500 or more bachelor's degrees were reported by these schools:

Purdue U	895
U of Missouri at Rolla	821
U of Illinois, Urbana	735
Newark College of Engrg	680
Georgia Inst of Tech	677
Northeastern U	654
Pennsylvania St U	620
U of Michigan	597
U of Washington	590
Virginia Poly Inst	587
North Carolina St U	581
U of Minnesota	543
Michigan Tech U	532

Schools reporting 300 or more master's or engineer degrees were:

Stanford U	619
MIT	534
U of Calif., Berkeley	489
New York U	415
U of Southern Calif.	401
U of Missouri at Rolla	376
Northeastern U	367
U of Michigan	351
Purdue U	325
Poly Inst of Brooklyn	323
U of Illinois, Urbana	304

100 or more doctorates were awarded at each of the following schools:

MIT	175
Stanford U	170
U of Calif., Berkeley	161
U of Illinois, Urbana	136
Purdue U	116

ECPD Accreditation

Since the majority of engineering schools awarding bachelor's degrees have at least one curriculum accredited by Engineers' Council for Professional Development, only those schools not on the ECPD list are asterisked in Table 23. 3,723 bachelor's degrees were awarded by non-ECPD schools and 39,444 by ECPD schools. The number awarded in curricula specifically accredited by ECPD would be somewhat smaller than 39,000 if statistics were tallied by accredited curricula only.

Minority Groups

As usual in the EMC surveys schools were asked to break out the total numbers of degrees earned by women, foreign nationals, and U.S. Negroes. Although many institutions still profess inability to provide these numbers, or simply leave the spaces blank, the totals below are probably not underreported by very much:

	Bachelor's	Master's	Engineer	Doctor's
Women	353	156	2	25
Foreign Nationals	1565	2930	22	741
U.S. Negroes	407	47	0	8

Table 23A Bachelor's Degrees in Engineering, by School and Curriculum, 1970-1971

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
ALABAMA																	
Auburn U	48	12	40	54	106			66	61				7	394	0	3	1
Tuskegee Inst					21				10					31			15
U of Alabama	32		25	24	47			24	26	21			3	202	3	0	1
#U of Alabama-Huntsville						15								15	0	1	0
ALASKA																	
U of Alaska				10	5				1					16	0	0	
ARIZONA																	
Arizona St U			25	36	107		19	3	51				7	248	0	0	0
U of Arizona	34	1	11	36	45				49	7	11		48	242	2	12	0
ARKANSAS																	
#Arkansas St U		9												9	0	0	0
#John Brown U				4*	6				5					15	0	0	0
U of Arkansas		8	32	43	75		2	34	35					229	0	1	0
CALIFORNIA																	
Calif Inst of Tech			5			50								55	0	8	0
#Calif Maritime Acad													38	38	0	0	0
#Cal St Coll Fullerton						29								29	1	1	0
Cal St Coll Long Beach			9	58	86			13	43					209			
Cal St Coll Los Angeles						135								135	2	NA	4E
Cal St Poly Kellogg	37		31	80	120			19	48					335	4	84	NA
Cal St Poly San Luis Ob	37	8			108*			19	94	9			55	330	1	73	1
Chico St Coll				32	11		7		10					60	0	14	0
Fresno St Coll				22	19			3	15				2*	61	0	10	0
Harvey Mudd Coll						6								6	0	0	0
#Heald Engineering Coll				16	68				26					110	NA	NA	NA
#Humboldt St Coll				18			3							21	0	0	0
Loyola U of Los Angeles				11	12				13					36	0	3	0
#Northrop Inst of Tech	150*				58	2			23					233			
Sacramento St Coll				40	33				16					89	0	15E	0
#San Diego Coll of Engrg					10*									10	0	3	4
San Diego St Coll						110								110			
San Fernando Val St Coll						86								86	NA	NA	NA
#San Francisco St Coll						35								35	1	10	3
San Jose St Coll			8	43	100	9		21	39				13	233			
Stanford U			7	16	36	19		14	21			2		115	1	6	0
U.S.Navy Post-Grad Sch	3				29				5					37	0	0	0
U of Calif Berkeley			30	87	197			18	68	6			23	429	4	91	4
U of Calif Davis	9	4	20	56	55				28				3	175	2	7	1
U of Calif Irvine					25									25			
U of Calif Los Angeles						329								329	10	NA	NA
#U of Calif San Diego							13							13	0		0
U of Calif Santa Barbara			18		54				27					99	0	7	0
#U of the Pacific				7	1								5	13	0	4	0
#U of Redlands						7								7	0	0	1
U of Santa Clara				28	28	2			17					75	0	1	0
U of Southern Calif	26		9	25	42			7	23			9		141	2	16	NA
#West Coast U					73				36					109	0	10	0
#Western States Coll					31									31	0	17	1
COLORADO																	
Colorado Sch of Mines			49							40	27	29	73	218	1	11	1
Colorado St U		1		43	41		9		26					120	0	NA	NA
U.S. Air Force Acad	71			34	27	28	16						42	218	0	1	NA
U of Colorado	51		35	45	93	14*			32				53	323	7	NA	NA
U of Denver			14	12	13				14				3	56			

Table 23A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
CONNECTICUT																	
#Bridgeport Engrg Inst					22				26					48	0	1	0
#Trinity Coll						9								9	0	2	1
#U.S. Coast Guard Acad						52								52			
U of Bridgeport					23			23*	18					64	0	4	0
U of Connecticut			18	38	59				33					148	0	7	4
U of Hartford					21				17					38	2	1	0
U of New Haven				1	50	1		26	55					133	0	6	0
#Yale U						28								28	0	1	NA
DELAWARE																	
U of Delaware			37	26	26				25				21	135	1	7	0
DISTRICT OF COLUMBIA																	
Catholic U of America	10		6	10	14				10					50	2	10	0
George Washington U				11	31				5					47	3	1	NA
Howard U				17	34				33					84	2	26	58
FLORIDA																	
#Embry-Riddle Aero Inst	24													24			
#Florida Atlantic U													49	49	0	0	0
Florida Inst of Tech					67									67	0	1	0
#Florida St U							61							61	0	3	0
#Florida Tech U				4	8			1	6					19			
U of Florida	48	5	25	11	151		12	68	60	8			12	400	NA	NA	NA
U of Miami				22	55			16	27				9	129	1	NA	NA
#U of South Florida			10		45	29*		18	18*					120	1	3	
GEORGIA																	
Georgia Inst of Tech	102		64	76	151		4	184	86				10	677	19	29	NA
U of Georgia		25												25	1	0	NA
HAWAII																	
U of Hawaii				58	84	5			44					191	1	22	0
IDAHO																	
#Idaho St U						22								22			
U of Idaho		5	13	23	30				32	4	1		5	113	2	6	0
ILLINOIS																	
#Aero-Space Inst	27													27	2	6	3
Bradley U				22	38			22	29					111	2		NA
# Chicago Tech Coll				23	37			3*	35				20	118	0	38	14
Illinois Inst of Tech	86		33	23	100	1*	1	17		7			4*	272	1	15	NA
#Midwest Coll of Engrg					4				1					5	0	0	0
#Millikin U								9						9			
Northwestern U			19	11	29		19	34	25					137	3	3	0
#Parks Coll of Aero Tech	33													33			
#Southern Illinois U						25								25	0	5	0
U of Illinois-Urbana	87	23	31	126	145	44		26	111	10			132	735	2	NA	3
#U of Illinois-Chicago	18		16	40	106*			25*	57*	20			71	353			
INDIANA																	
#Indiana Inst of Tech	24		8	17	34				57					140	0	7	0
Purdue U	113	7	73	107	241	17*	27	97	188	25				895	4	20	5
Rose-Hulman Tech Inst			19	23	17				61					120	0	2	0
Tri-State Coll	17		15	67	64				86					249	0	17	1
U of Evansville					17			4	7					28	0	0	0
U of Notre Dame	36		25	19	37		10		52	1				180			
Valparaiso U				28	28				31					87	1	1	2

Table 23A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
IOWA																	
Iowa St U	55	24	50	106*	80	35*	2	34	42	4			6	438	0	NA	NA
U of Iowa			16	18	20			14	25					93	0	2	1
KANSAS																	
Kansas St U		7	9	26	44			13	41				13	153		6	2
U of Kansas	46		20	52	52				33			5	17	225	2	16	1
Wichita St U	21				53			12	16					102	0	5	NA
KENTUCKY																	
U of Kentucky		7	29	85	77				72	5				275	1	8	0
U of Louisville			25	22	36				38					121	0	3	0
LOUISIANA																	
L S U Baton Rouge	5	4	40	25	75			19	53			32	1*	254	1	45	2
#L S U New Orleans							38							38	1	0	0
Louisiana Tech U		2	24	26	59			16	44			7		178	0	0	1
#McNeese St Coll			7	6	21				7					41	0	0	1
Southern U				4	18				3					25	1	2	22
Tulane U			12	18	20	17			17					84		8	
U of SW Louisiana			10	13	15				13			5		56	0	0	0
MAINE																	
#Maine Maritime Acad													85	85	0	0	0
U of Maine		6	23	36	28				43				11	147	1	NA	NA
MARYLAND																	
Johns Hopkins U			1	20	59		6	18	34				21	159	1	NA	NA
U.S. Naval Acad	78				24				67				62	231	0		
U of Maryland	50		24	70	131				63				5*	343	2	23	3
MASSACHUSETTS																	
#Boston U	19							7*					20	46	2	4	1
Harvard U						7							19	26	3	1	0
Lowell Tech Inst			41	54	70				37				40*	242	3	NA	NA
M I T	43		22	29	209				64	14			6	387	12		4
#Mass Maritime Acad													43	43	0	0	0
Merrimack Coll				13	13			17						43	0	0	0
Northeastern U			73	119	269			64	129					654	6	NA	NA
SE Massachusetts U				19	29			1	25					74	0	3	0
Tufts U			27	32	37				43					139	5	4E	
U of Massachusetts	12		22	31	45			19	35					164	2	4	0
#Western New England Coll					28			15	35					78	1	0	2
Worcester Poly Inst			26	46	71				93				36	272	0	5	1
MICHIGAN																	
#Detroit Inst of Tech				34	31				38					103			
#General Motors Inst					71			155	230					456	2	23	3
#Lawrence Inst of Tech					46				62					108			
Michigan St U		11	32	59	93				94	5			67	361	8	3	5
Michigan Tech U			47	127	99				181	49	13		16	532	4	62	2
Oakland U						51								51	1	5	1
U of Detroit			23	40	54	3			47					167	1	4	0
U of Michigan	92		45	60	110		28	57	101	5			99	597	7		
Wayne St U			29	26	80			16	65	6				222	3	NA	2
#Western Michigan U								24						24			
MINNESOTA																	
U of Minnesota	48	11	50	82	161				167	11			13	543			

Table 23A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
MISSISSIPPI																	
Mississippi St U	20	5	32	42	81			30	25			16	14	265	4E	4E	4E
U of Mississippi			13	16	10				22				3	64	0	0	0
MISSOURI																	
#Rockhurst Coll							11							11		2	
U of Missouri-Columbia		10	15	49	72			8	78					232	3	10	2
U of Missouri-KC						9								9	0	0	0
U of Missouri-Rolla	15		74	162	210				199	36	9	11	105	821	6		
Washington U			15	4	18				14				16	67	4	4	1
MONTANA																	
Mont Mineral Sci & Tech							7			1	17	19	15*	59	1	8	0
Montana St U		5	38	50	33		1	14	33					174	6	6	0
NEBRASKA																	
U of Nebraska-Lincoln		15	18	72	90			8	66					269	NA	NA	NA
#U of Nebraska-Omaha				19		4		9						32	0	0	0
NEVADA																	
#U of Nevada-Las Vegas						10								10			
U of Nevada-Reno			2	27	10		4		12	4	3		9	71	NA	NA	NA
NEW HAMPSHIRE																	
Dartmouth Coll						23								23	0	2	0
#New England Coll				22										22			
U of New Hampshire			11	18	37				40					106	1	4	0
NEW JERSEY																	
Fairleigh Dickinson U					53			15	29					97			
Monmouth Coll					22*									22	0	0	0
Newark Coll of Engrg			85	111	184		34	94	172					680	7	20	8
Princeton U	33		14	15	33	18								113	0	9	NA
Rutgers U	39	2	27	24	48			24					21	185	3	NA	NA
Stevens Inst of Tech						250								250	0	20	1
NEW MEXICO																	
N M Inst Mining & Tech										8	4	6	8	26	1	3	2
New Mexico St U		8	15	46	66			17	59					211	0	14	0
U of New Mexico			17	22	63				38					140	0	5	1
NEW YORK																	
City Coll of CUNY			48	67	178				82					375	7	20E	25E
Clarkson Coll of Tech			57	69	67				105					298	3		
Columbia U			37	30	50			21	19	4	3		9	173	5	NA	NA
Cooper Union			12	14	25		21		20					92	4	0	1
@Cornell U			42	55	98	35*		79	62				41	412	6	NA	4
#Hofstra U					17		19	14	5					55	0	3	0
#L I U-CW Post Coll							47	8						55	0		
Manhattan Coll			37	63	77				45					222			
New York U	40		15	39	104		7	31	41	4			20	301	10	29	
Poly Inst of Brooklyn	59		19	21	118				36	15			31	299	5		
Pratt Inst			11		39			14	13					77			
@R P I - Troy	28		27	29	126*		24		85				91	410	6	19	NA
Rochester Inst of Tech					64				45					109	0	0	0
SUNY Buffalo	6		23	38	104		9	21	30				7	238	3	13	0
SUNY Coll Ceramics Alfred													57	57	2	3	0
#SUNY Maritime Coll													36	36	0	0	0
SUNY Stony Brook							90							90			
Syracuse U			15	22	36			21	37					131	1	7	2

Table 23A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
NEW YORK (cont.)																	
Union Coll				21	34				15					70	0	0	0
#U.S.Merchant Marine Acad													109	109			
U of Rochester			11		13				17				8*	49	1	2	0
Webb Inst of Naval Arch													12	12	0	0	0
NORTH CAROLINA																	
Duke U				21	26				31				4	82	1	5	3
N C Agric & Tech St U					14				11				16	41	2	2	39
North Carolina St U	32	13	32	100	112	144*		33	69				46	581	3	NA	NA
#U of N C Charlotte				4	13				10					27	0	0	0
NORTH DAKOTA																	
North Dakota St U		26		36	54			29	56					201	0	2	0
U of North Dakota			16	20	23			10	22				2	93	1	7	0
OHIO																	
Air Force Inst of Tech					18									18	0	0	0
Case Western Reserve U			32	10	50	60			42	16				210	1	3	2
Cleveland St U			19	19	37	24	14	4	32	12				161	0	NA	NA
Ohio Northern U				13	20				21					54	0	0	1
Ohio St U	76	17	28	68	72			73	78	4			41*	457	2	14	NA
Ohio U			28	30	63			15	43					179	0	9	3
U of Akron			18	18	51				43					130	0	7	0
U of Cincinnati	31		27	23	79		2		81	15				258			
U of Dayton			22	20	48			18	36					144	3	5	1
U of Toledo			16	25	29			16	44				6	136	1	20	
#Wright St U													28	28	0	0	0
Youngstown St U			17	23	41			28	44	12				165	0	NA	NA
OKLAHOMA																	
Oklahoma St U		19	22	36	98	3		48	58				7	291	NA	NA	NA
U of Oklahoma	22		17	20	49	6		19	33	6		11	8	191	4	25	0
U of Tulsa			17		15				32			26	8	98	3	16	1
OREGON																	
Oregon St U		6	23	53	60	12		18	60	8			18	258			
#U of Portland					5	17	5		13					40			
PENNSYLVANIA																	
Bucknell U			13	25	19				23					80	1	3	NA
Carnegie Mellon U			51	29	101				65	20				266	6	9	0
Drexel U			44	71	125			19	108	26				393	1	2	5
Gannon Coll					13				23					36	0	0	0
#Geneva Coll						11		6						17	2	1	1
#Grove City Coll			9		21				24	17				71	0	2	0
Lafayette Coll			23	21	35	2		4	36	11				132	0	7	2
Lehigh U			54	33	62			43	76	27				295	0	8	3
Pennsylvania St U	61	10	41	70	150		11	69	115	17	9		67	620	3	3	NA
#Phila Coll of Textiles													20	20			
P M C Colleges			4	6	22				13					45			
Swarthmore Coll						11								11	1	1	0
U of Pennsylvania			19	10	37				25	5				96	4	7	NA
U of Pittsburgh	33		51	53	100			46	102	26	1	14		426	4	5	2
Villanova U			24	53	71				81					229	3	8	0
RHODE ISLAND																	
Brown U	6			13	27				8				10	64	0	2	1
U of Rhode Island			17	27	42		4	19	35					144		9	NA

Table 23A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
SOUTH CAROLINA																	
The Citadel				30	15									45	0	2	0
Clemson U		5	28	63	52	2*			48	4			12	214	1	3	NA
U of South Carolina			18	31	39				23					111	2	4	1
SOUTH DAKOTA																	
S D Sch of Mines & Tech			48	39	46				45	4	11		13	206	1	22	0
South Dakota St U		10		44	36				25				7	122	1	4	0
TENNESSEE																	
Christian Brothers Coll			5	13	37				32					87	0	5	1
#Memphis St U				3	18				11					32	0	2	0
#Tennessee St U				7	9				7				3	26	1	1	24
Tennessee Tech U			23	33	51		17	31	39					194	2	12	1
#U of Tenn Chattanooga							2	18					8	28	1	1	0
U of Tenn Knoxville	15		48	46	108		5	62	80	3			29	396			
Vanderbilt U			19	40	32		12		37				39	179	11	5	1
TEXAS																	
Lamar St Coll of Tech			15	19	41			20	43					138	2	15	
#LeTourneau Coll	5				2			11	11				6*	35	0	1	0
Prairie View A & M Coll				11	26				22				12	71	5	0	71
@Rice U			24	4	51				19					98	0	0	0
#St. Mary's U							2	7						9	0	1	0
Southern Methodist U				11	31	2		11	18				11	84	1	1	
Texas A & I U			13		23	20						13*		69	NA	NA	NA
Texas A & M U	50	25	57	48	75			46	97			14	27	439	0	17E	2E
Texas Tech U		14	30	30	62			27	68			12	13	256	0	6	1
Trinity U							16							16	0	0	0
U of Houston			40	34	48			15	40					177	3		
U of Texas Arlington	31			21	80			18	71					221		10	1
U of Texas Austin	73		55	40	122		16		103			23	22	454	2	NA	NA
U of Texas El Paso				30	43				31	13				117	3	17	NA
UTAH																	
Brigham Young U			13	35	63				31					142	0	15	0
U of Utah			15	30	56			8	37	1	1		50	198	3	7	1
Utah St U		3		16	24			7*	21					71	0	8	0
VERMONT																	
Norwich U				15	14				16				10	55			
U of Vermont		1		29	19				24				12	85	1		
VIRGINIA																	
# Inst of Textile Tech													9	9			
Old Dominion U				11*	19				5*				2	37	2	2	0
U of Virginia	32		16	29	32		13		29				19	170	1	2	1
Virginia Military Inst				37	10									47	0	0	0
Virginia Poly Inst	37	12	49	115	142			74	115	11	12		20	587	NA	NA	NA
WASHINGTON																	
#Gonzaga U				5	7		2		5					19	0	3	0
St Martins Coll				17										17	0	2	0
Seattle U				7	15		9		7					38	0		NA
U of Washington	59		50	85	161			57	140	10	7		21	590	10	39	1
#Walla Walla Coll				4	3				2					9	0	1	0
Washington St U		4	30	52	64				44				7	201	1	22	NA

Table 23A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
WEST VIRGINIA																	
Marshall U				9		10								19	0	0	0
W Va Inst of Tech			2	20	31				19					72	NA	NA	NA
West Virginia U	41	5	9	41	39			31	39		7	5		217	NA	NA	NA
WISCONSIN																	
Marquette U				46	133				69					248	2	20E	0
#Milwaukee Sch of Engrg					98				73					171	0	2	2
U of Wisconsin-Madison		12	59	83	126			26	114	16			27	463	0	NA	1
U of Wisconsin-Milwaukee				26*	49		10	6	18*				20	129			
Wisconsin St U				63							2			65	1	5	0
WYOMING																	
U of Wyoming		5	3	45	43	12			38			18		164	0	30	1
PUERTO RICO																	
U of Puerto Rico			36	87	90			39	59					311	0	0	0
TOTALS:	2436	412	3626	6602	12145	1907	691	2774	8966	613	138	277	2580	43167	353	1565	407

# Indicates school *not* on ECPD list of accredited curricula for 1970.
@ Indicates school has curricula accredited by ECPD at master's level only.
*The following bachelor's degrees are included under the category indicated:

John Brown U
- 4 Bldg Constr & Des under Civil

Cal St Poly San Luis Ob
- 89 Electronic Engrg under Electrical

Fresno St Coll
- 2 Surveying & Photogrammetry under Other

Northrop Inst of Tech
- 97 Aircraft Maint Engrg under Aerospace

San Diego Coll of Engrg
- 10 Electronic Engrg under Electrical

U of Colorado
- 14 Engrg Design & Econ Eval under Engrg, General

U of Bridgeport
- 10 Manufacturing Engrg under Industrial
- 13 Industrial Design under Industrial

U of South Florida
- 18 Energy Conversion under Mechanical
- 29 Structures, Materials & Fluids under Engrg, General

Chicago Tech Coll
- 3 Tool Engrg under Industrial

Illinois Inst of Tech
- 1 Engineering Graphics under Engrg, General
- 4 Fire Protection Engrg under Engrg, General

U of Illinois Chicago
- 104 Communications Engrg under Electrical
- 1 Energy Conversion under Mechanical
- 11 Manufacturing Engrg under Industrial
- 39 Mechanical Anal & Des under Mechanical
- 6 Soil Engrg under Civil
- 28 Structural Design under Civil
- 17 Thermomechanical Engrg under Mechanical
- 4 Transportation Systems Engrg under Civil
- 2 Urban Systems Engrg under Civil
- 2 Wave Propagation and Radiation under Electrical

Purdue U
- 17 Interdisciplinary Engrg under Engrg, General

Iowa St U
- 35 Engrg Operations under Engrg, General
- 28 Construction Engrg under Civil

LSU Baton Rouge
- 1 Sugar under Other

U of Maryland
- 5 Fire Protection under Other

Boston U
- 7 Manufacturing Engrg under Industrial

Lowell Tech Inst
- 8 Paper Engrg under Other

Mont Mineral Sci & Tech
- 6 Mineral Dressing Engrg under Mining

Monmouth Coll
- 22 Electronic Engrg under Electrical

Cornell U
- 35 College Program under Engrg, General

RPI—Troy
- 9 Electric Power under Electrical

U of Rochester
- 8 Optics under Other

North Carolina St U
- 144 Engineering Operations under Engrg, General

Ohio St U
- 11 Welding Engrg under Other

Clemson U
- 2 Engineering Analysis under Engrg, General

LeTourneau Coll
- 6 Welding Engrg under Other

Texas A&I U
- 13 Natural Gas Engrg under Petroleum

Utah St U
- 7 Manufacturing Engrg under Industrial

Old Dominion U
- 11 Structures Engrg under Civil
- 5 Thermal Engrg under Mechanical

U of Wisconsin Milwaukee
- 26 Structural Engrg under Civil
- 8 Energy Conversion under Mechanical

Table 23B Bachelor's Degrees in Engineering, by School and Curriculum, 1970-1971 (Supplementary List)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
ALABAMA																
Auburn U													3			4
U of Alabama									3*							
ARIZONA																
Arizona St U						7										
U of Arizona					20		8		9					11		
CALIFORNIA																
#Calif Maritime Acad											38					
Cal St Poly San Luis Ob	39							16								
San Jose St Coll													13			
U of Calif Berkeley		2	1		4		14		2*							
U of Calif Davis													3			
#U of the Pacific												5				
COLORADO																
Colorado Sch of Mines					26		13		17	17						
U.S. Air Force Acad						42										
U of Colorado	17				22		14									
U of Denver												3*				
DELAWARE																
U of Delaware												21*				
FLORIDA																
#Florida Atlantic U											49*					
U of Florida														12		
U of Miami	9															
GEORGIA																
Georgia Inst of Tech			4													6
IDAHO																
U of Idaho									5							
ILLINOIS																
#Chicago Tech Coll	20															
#U of Illinois-Chicago		11		22		15*	6	7*							10*	
U of Illinois-Urbana	22		17	60		11	22									
IOWA																
Iowa St U		1	5													
KANSAS																
Kansas St U														13		
U of Kansas	4						13									
MAINE																
#Maine Maritime Acad											85					
U of Maine							11									
MARYLAND																
Johns Hopkins U						13	2								6*	
U.S. Naval Acad											39*				23	
MASSACHUSETTS																
#Boston U		6										7			7	
Harvard U					19											
Lowell Tech Inst														19		13

Table 23B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
MASSACHUSETTS (cont.)																
M I T											6*					
#Mass Maritime Acad											43					
Worcester Poly Inst												36				
MICHIGAN																
Michigan St U				51									5		11	
Michigan Tech U									16							
U of Michigan					18	5	11				49*		1	15		
MINNESTOA																
U of Minnesota									13*							
MISSISSIPPI																
Mississippi St U		3											5	6		
U of Mississippi									3							
MISSOURI																
U of Missouri-Rolla			17			1			13	2		72				
Washington U					15				1							
MONTANA																
Mont Mineral Sci & Tech									12	3						
NEVADA																
U of Nevada-Reno									7	2						
NEW JERSEY																
Rutgers U			21*													
NEW MEXICO																
N M Inst Mining & Tech			2					6								
NEW YORK																
Columbia U														9		
@Cornell U							32						9			
New York U														15	5*	
Poly Inst of Brooklyn															31	
R P I - Troy		5				4		20				35	19	8		
SUNY Buffalo														7		
SUNY Coll Ceramics Alfred			57													
#SUNY Maritime Coll											36					
#U.S. Merchant Marine Acad											109					
Webb Inst of Naval Arch											12					
NORTH CAROLINA																
Duke U		4														
N C Agric & Tech St U	4				7		5									
North Carolina St U			5			2							11	28		
NORTH DAKOTA																
U of North Dakota									2							
OHIO																
Ohio St U			11				19									
U of Toledo							6									
#Wright State U							1								27	
OKLAHOMA																
Oklahoma St U	7															

Table 23B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
OKLAHOMA (cont.)																
U of Oklahoma							3	2	2					1		
U of Tulsa					4		4									
OREGON																
Oregon St U							11							7		
PENNSYLVANIA																
Pennsylvania St U	27		12			12								16		
#Phila Coll of Textiles																20
RHODE ISLAND																
Brown U		4											6			
SOUTH CAROLINA																
Clemson U			12													
SOUTH DAKOTA																
S D Sch of Mines & Tech									13							
South Dakota St U							7									
TENNESSEE																
#Tennessee St U	3															
U of Tenn Knoxville						3	14							12		
#U of Tenn Chattanooga							8									
Vanderbilt U		1			16	1							11		10	
TEXAS																
Prairie View A & M Coll	12															
Southern Methodist U															11	
Texas A & M U									3		11			13		
Texas Tech Coll							13									
U of Texas Austin	22															
UTAH																
U of Utah				38					9				3			
VERMONT																
Norwich U												10				
U of Vermont												12				
VIRGINIA																
#Inst of Textile Tech																9
Old Dominion U												2*				
U of Virginia					1									18		
Virginia Poly Inst			6			14										
WASHINGTON																
U of Washington			21													
Washington St U													7			
WISCONSIN																
U of Wisconsin-Madison						12								15		
U of Wisconsin-Milwaukee				3		5							12			
TOTALS:	**186**	**37**	**191**	**174**	**152**	**147**	**237**	**51**	**130**	**24**	**477**	**203**	**108**	**225**	**141**	**52**

# Indicates school *not* on ECPD list of accredited curricula for 1970
@ Indicates school has curricula accredited by ECPD at master's level only.
*The following bachelor's degrees are included under the category indicated:

U of Alabama — 3 Mineral Engrg under Geological
U of Calif Berkeley — 2 Engrg Geoscience under Geological
U of Denver — 3 Engrg Administration under Management
U of Delaware — 21 Engrg Administration under Management
Florida Atlantic U — 49 Ocean Engrg under Marine
U of Illinois Chicago — 6 Operations Research under Systems; 5 Structural Mechanics under Engrg Mechanics; 7 Water and Air Resources under Environmental
Johns Hopkins U — 6 Oper Res & Indust Engrg under Systems
U.S. Naval Acad — 15 Naval Architecture under Marine; 13 Ocean under Marine
MIT — 6 Ocean under Marine
U of Michigan — 49 Naval Arch and Marine Engrg under Marine
U of Minnesota — 8 Mineral Engrg under Geological
Rutgers U — 6 Ceramic Science under Ceramic
New York U — 5 Operations Research under Systems
Webb Inst of Naval Arch — 12 Naval Arch and Marine Engrg under Marine
Old Dominion U — 2 Administrative Engrg under Management

Table 24A Master's Degrees in Engineering, by School and Curriculum, 1970-1971

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
ALABAMA																	
Auburn U	5	1	5	4	25			7	8					55	0	10	0
Tuskegee Inst					6				5					11			1
U of Alabama-Huntsville						20								20	0	0	0
U of Alabama	7		2	3	4			8	2				7	33	0	4	0
ALASKA																	
U of Alaska													3	3	0	0	
ARIZONA																	
Arizona St U			3	10	49	14		16	4				4	100	0	0	0
U of Arizona	21		6	10	14				13	1			24	89	1	17	0
ARKANSAS																	
U of Arkansas			2	14	6		1	12	3					38	1	7	0
CALIFORNIA																	
Calif Inst of Tech	27		6		23		12		15				11	94	1	28	0
Cal St Coll Fullerton						53								53	0	6	0
Cal St Coll Long Beach				26	33				22					81			
Cal St Coll at Los Angeles				7	14				7					28	OE	13E	OE
Harvey Mudd Coll						1								1	0	0	0
Loyola U of Los Angeles				11	6				4					21	0	5	0
Sacramento St Coll				20	2				7				2	31	0	8E	0
San Diego St Coll	10			4	29				22					65			
San Fernando Val St Coll						33								33	NA	NA	NA
San Jose St Coll			10	25	44			25	24				1	129	1		
Stanford U	35		32	107	182	5	5	56	55			8	106	591	5	205	0
U.S. Navy Post-Grad Sch	14				68				16					98	0	0	0
U of Calif Berkeley			21	153	131			57	75	12			40	489	4	276	1
U of Calif Davis		7		15	14		9		14					59	1	17	0
U of Calif Irvine					17									17			
U of Calif Los Angeles					39	46*			25*				163	273	5	60	NA
U of Calif San Diego							10						2	12	0	3	0
U of Calif Santa Barbara			4		24				17					45	0	13	0
U of Redlands						14								14	0	0	0
U of Santa Clara				1	71	9			12				18	111	1	11	1
U of Southern Calif	33		13	32	156			29	86			10	13	372	2	136	NA
West Coast U													103	103	1	17	6
COLORADO																	
Colorado Sch of Mines			14							9	3*	3	26	55	0	25	0
Colorado St U		2		15	6				6					29	0	NA	NA
U of Colorado	15		9	13	34	1*			8				16	96	NA	NA	NA
U of Denver			9	3	7				6	5			1	31			
CONNECTICUT																	
R P I - Hartford							40		54				35	129	5		
U of Bridgeport					7				6				5	18	0	2	0
U of Connecticut	3		9	20	32				21	11			6	102	1	26	0
U of New Haven								5						5	0	0	0
Yale U							25							25	3	15	NA
DELAWARE																	
U of Delaware			16	19	6				9					50	1	20	0
DISTRICT OF COLUMBIA																	
Catholic U of America	21		4	24	14				35				12	110	1	20	0
George Washington U	3			5*	41*				12				47*	108	0	1	NA
Howard U				7	3				6					16	1	14	2E

Table 24A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
FLORIDA																	
Florida Inst of Tech					30									30	0	8	0
Florida St U							11							11	0	0	0
U of Florida	12	1	15	15	45		14	51	8	9			17	187	NA	NA	NA
U of Miami				5	9			4	6					24	0	NA	NA
U of South Florida					4	8*		3	5*					20			
GEORGIA																	
Georgia Inst of Tech	45		20	44	57		7	30	18	8			38	267	5	102	NA
U of Georgia		6												6	0	0	NA
HAWAII																	
U of Hawaii				6	23				5				9	43	2	16	0
IDAHO																	
Idaho St U													2	2			
U of Idaho		1	2	7	9				5	2			3	29	0	11	0
ILLINOIS																	
Bradley U				4	2			4	6				17	33	1		NA
Illinois Inst of Tech	26		18	5	39	4*		34		3		3*	6	138	0	86	NA
Midwest Coll of Engrg				3	21								11	35	0	4	0
Northwestern U			11	47*	46			15	12				30	161	0	46	1
Southern Illinois U						11								11	0	3	0
U of Illinois-Chicago									8*				41	49			
U of Illinois-Urbana	10	2	9	102	65			5	32	8	2		69	304	NA	21	NA
INDIANA																	
Purdue U	48	5	18	66	78	19*		32	43	6			10	325	4	54	3
U of Notre Dame	3		5	4	8				2	5				27			
IOWA																	
Iowa St U	8	5	11	13	21			7	4	5			7	81	0	NA	NA
U of Iowa			3	14	13			17	10				6	63	1	25	
KANSAS																	
Kansas St U		6	8	16	8			21	6				11	76		42	
U of Kansas	6		4	8	34	2			6			8*	23	91	4	45	0
Wichita St U	2				4				6				2	14	0	5	NA
KENTUCKY																	
U of Kentucky		2	7	12	11				8	4			2	46	0	16	0
U of Louisville			11	11	18				12					52	0	0	0
LOUISIANA																	
L S U Baton Rouge		1	13	8	13		3	6	17			2	2	65	NA	NA	NA
Louisiana Tech U			3	2	6				6					17	0	0	0
McNeese St Coll			3											3			
Tulane U			9	5					8				2	24		4	
U of SW Louisiana			2	3	1							1		7			
MAINE																	
U of Maine		3	6	8	3				1				1	22			
MARYLAND																	
Johns Hopkins U	4				51								38	93	2	NA	NA
Loyola Coll													8	8			
U of Maryland	2		16	15	28				13					74		10	1

Table 24A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
MASSACHUSETTS																	
Boston U	1							8*						9	0	2	0
Harvard U						16							40	56	3	11	1
Lowell Tech Inst			10		15				2				1	28	0	NA	NA
M I T	54		43	51	113				89	20			51	421	2		4
Northeastern U				36	136	55		3	36				101	367	3	NA	NA
Tufts U			2	10	4	3*			3					22			
U of Massachusetts			12	12	9			11	12				2	58	0	16	0
Worcester Poly Inst			9	9	16				14				1	49		26	
MICHIGAN																	
Michigan St U		5	8	14	16				7	4			16	70	2	29	0
Michigan Tech U			4	10	11				11	4	1		7	48		12	
Oakland U						14								14	0	5	0
U of Detroit						58								58	0	7	1
U of Michigan	23		20	35	32			50	80	8			103	351	8		
Wayne St U			17	40	29			23	44	7				160	1	NA	0
MINNESOTA																	
U of Minnesota	2	1	11	18	29				47	3			1	112			
MISSISSIPPI																	
Mississippi St U	5	3		15	5			5	4				4	41	0	156	0
U of Mississippi							18							18	0	9	0
MISSOURI																	
U of Missouri-Columbia		5	4	19	38			16	17				5	104	0	26	0
U of Missouri-Rolla	5		40	75	25				39	21	2	15	154	376	2		
Washington U			7	9	19				8				48*	91	2	48	1
MONTANA																	
Mont Mineral Sci & Tech							1			3	2*	3	2	11	0	5	0
Montana St U		2	2	15	4			10	8					41	0	13	0
NEBRASKA																	
U of Nebraska-Lincoln		6	1	8	4				7				4	30	NA	NA	NA
NEVADA																	
U of Nevada-Reno				4	2				1		1		5	13	NA	NA	NA
NEW HAMPSHIRE																	
Dartmouth Coll						6								6	0	2	0
U of New Hampshire			1	3	6				5					15	0	6	0
NEW JERSEY																	
Fairleigh Dickinson U					17				13				3	33			
Monmouth Coll					6*									6	0	0	0
Newark Coll of Engrg			13	30	38		16	64	20					181	2	25	0
Princeton U	21		1	6	8									36	2	18	NA
Rutgers U	7	1	3	7	14			4					8	44	0	NA	NA
Stevens Inst of Tech			12	1	37				31	10			11	102	0	39	1
NEW MEXICO																	
N M Inst Mining & Tech										7	1	1		9		6	
New Mexico St U			6	12	23				5					46	0	20	0
U of New Mexico			7	15	24				19				9	74	0	12	1
NEW YORK																	
City Coll of CUNY			9	18	44				37					108	1	20E	5E
Clarkson Coll of Tech			9	12	8		9	1	9					48			

Table 24A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
NEW YORK (cont.)																	
Columbia U			11	54	75			48	20	5	5		9	227	6	NA	NA
Cooper Union			1	2	2				7					12	0	3	0
@Cornell U	1	4	18	30	65			28	26				22	194	0	NA	0
L I U - C W Post Coll													120	120	1		
Manhattan Coll			8										11	19			
New York U	25		29	55	149		1	36	18	7			95	415	17	80	
Poly Inst of Brooklyn	13		14	53*	124*				22	8			85	319	8		
Pratt Inst			3		10				6					19			
@R P I - Troy	13		22	21*	100*		3		30				33	222	4	35	0
Rochester Inst of Tech					3									3	0	0	0
SUNY Coll Ceramics Alfred													3	3	0	2	0
SUNY Buffalo	1			24	20		5	12	17				1	80	0	49	0
SUNY Stony Brook					17								25	42			
Syracuse U			14	8	83			41	18					164	2	34	0
Union Coll					22				25					47	0	4	0
U of Rochester			3		9				12				22*	46	1	17	0
NORTH CAROLINA																	
Duke U				8	10				5					23	0	13	1
North Carolina St U		7*	3	24	19			11	33				16	113	3	NA	NA
@U of N C Chapel Hill				7									2*	9	0	2	0
NORTH DAKOTA																	
North Dakota St U		2		3	7			3	12					27	0	17	0
U of North Dakota			5	4	4				2					15	0	10	0
OHIO																	
Air Force Inst of Tech	56				55												
Case Western Reserve U			5	4	8				4	7			34*	145	0	1	5E
Cleveland St U			11	6	17			7	6				28	56	1	23	0
Ohio St U	21	5	21	22	71			27	36	13			2	49	0	NA	NA
Ohio U			8	1	7			32	6				21*	237	0	33	NA
U of Akron			4	12	7				11					54	0	23	1
U of Cincinnati	19		7	48	11				26	7				34	1	12	0
U of Dayton			1	3	15	6			5				11	129			
U of Toledo			8	8	11		16	15	9				20	50	1	7	1
Wright St U														67		13	
Youngstown U				6	5				10	3			1	1	0	0	0
OKLAHOMA														24	0	NA	NA
Oklahoma St U		2	5	25	15	6		29	30					112	NA	NA	NA
U of Oklahoma	4		5	8	14			11	6			7	29	84	0	16	0
U of Tulsa	5		12		2							13	10	42		28	
OREGON																	
Oregon St U		8	3	18	7			7		1			2	46			
PENNSYLVANIA																	
Bucknell U			3	4					5					12	0	7	NA
Carnegie Mellon U			15	19	45				18	18			14	129	2	27	1
Drexel U	3		8	14	26				15	4			45	115	1	8	3
Lehigh U			17	20	10			19	9	20				95	1	26	1
Pennsylvania St U	10	7	11	9	18			6	14	3	1		22	101	0	13	NA
P M C Colleges									1				5	6		2	
U of Pennsylvania			14	20	107				21	4			4	170	7	32	NA
U of Pittsburgh			11	30	12			8	13	14		3		91	1	27	0
Villanova U			2	21*	7				9					39	0	10	0

Table 24A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
RHODE ISLAND																	
Brown U				2	13				5				3	23	0	11	0
U of Rhode Island			8	11	5			6	5				11	46	1	18	NA
SOUTH CAROLINA																	
Clemson U		3	4	3	6				2				17	35	0	6	NA
U of South Carolina			9	6	10				8					33		20	
SOUTH DAKOTA																	
S D Sch of Mines & Tech			6	19	11				8	1	4			49	0	31	0
South Dakota St U		3		13	8				7					31	0	9	0
TENNESSEE																	
Memphis St U				7	6				8					21	0	10	0
Tennessee Tech U			10	10	7		1		12				9	49	0	31	0
U of Tenn Knoxville	5		12	9	30		6	8	17	1			10	98			
Vanderbilt U				5	4				2				18	29	0	7	1
TEXAS																	
Lamar St Coll of Tech			7	3	1			24	1					36	NA	NA	
@Rice U			23	4	40				20				1	88	1	8	0
St. Mary's U													8	8	1	0	0
Southern Methodist U	3			13	85			2	19				67	189	5	23	1
Texas A & I U			3		6									9	NA	NA	NA
Texas A & M U	10	5	4	31	9			83	20			6	59	227	1	13E	0
Texas Tech U		3	6	6	15			4	4					38	1	1	0
Trinity U							1							1	0	0	0
U of Houston			7	7	20	7		7	15					63	0		
U of Texas Arlington			2	4	9			3	16				10	44	1	12	
U of Texas Austin	13		15	23	23				21			9	35	139	0	NA	NA
U of Texas El Paso				6	22				22	4				54	0	0	NA
UTAH																	
Brigham Young U			7	37	35				27					106	0	22	0
U of Utah			2	1	7				5	3	4		48	70	0	2	0
Utah St U		13		15	4			6*	10					48	0	25	0
VERMONT																	
U of Vermont				4	4				5					13		5	
VIRGINIA																	
Inst of Textile Tech													9	9			
Old Dominion U				7	12				21					40	0	16	0
U of Virginia	6		9	11	13				8				31	78	6	12	0
Virginia Poly Inst	1		7	14	17			3	8	1	1		17	69	NA	NA	NA
WASHINGTON																	
Seattle U					7		2		6					15	0		NA
U of Washington	32		15	47	34				32	7	1		25	193	0	59	1
Washington St U		2		6	8				7				2	25	0	20	NA
WEST VIRGINIA																	
West Virginia U	3	2	1	29	5	12		12	2		1	2	1	70	NA	NA	NA
WISCONSIN																	
Inst of Paper Chemistry			5											5	0	3	0
Marquette U				14	16				10					40	0	6E	0
Milwaukee Sch of Engrg													18	18	0	0	0
U of Wisconsin-Madison	2		10	26	45	6		11	26	11			17	154	NA	NA	0
U of Wisconsin-Milwaukee				3	9			1	10	6				29			

Table 24A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
WYOMING																	
U of Wyoming		1	2	8	14				7			2	5*	39	0	16	1
PUERTO RICO																	
U of Puerto Rico				6					1				7	14	0	0	0
TOTALS:	724	132	1086	2456	4235	429	216	1149	2318	323	29	96	2696	15889	156	2930	47

@Indicates school has curricula accredited by ECPD at master's level.
*The following master's degrees are included under the category indicated:

U of Calif Los Angeles
- 46 Engineering Systems under Engrg General
- 25 Energy and Kinetics under Mechanical

Colorado Sch of Mines
- 1 Mineral Economics under Mining

U of Colorado
- 1 Engrg Design and Econ Eval under Engrg, General

George Washington U
- 5 Structural Engrg under Civil
- 31 Communications under Electrical
- 9 Controls Systems under Other

U of South Florida
- 8 Structures, Materials and Fluids under Engrg, General
- 5 Energy Conversion under Mechanical

Illinois Inst of Tech
- 4 Engineering Graphics under Engrg, General
- 3 Gas Engrg under Petroleum

Northwestern U
- 14 Transportation under Civil

U of Illinois Chicago
- 8 Energy Conversion under Mechanical

Purdue U
- 19 Special Grad Program in Engrg under Engrg, General

U of Kansas
- 6 Petroleum Management under Petroleum

Boston U
- 8 Manufacturing Engrg under Industrial

Tufts U
- 3 Engrg Graphics and Design under Engrg, General

Washington U
- 10 Control Systems under Other

Mont Mineral Sci & Tech
- 2 Mineral Dressing Engrg under Mining

Monmouth Coll
- 6 Electronic Engrg under Electrical

Poly Inst of Brooklyn
- 20 Elect Engrg/System Science under Electrical
- 21 Transportation Planning under Civil

R P I—Troy
- 31 Electric Power under Electrical
- 6 Transportation Engrg under Civil
- 19 Optics under Other

U of Rochester
- 7 Biological and Agric Engrg under Agriculture

North Carolina St U
- 2 Air Pollution under Other

U of NC Chapel Hill
- 7 Reliability Engrg under Other

Air Force Inst of Tech
- 6 Welding Engrg under Other

Ohio St U
- 5 Transportation under Civil

Villanova U
- 6 Manufacturing Engrg under Industrial

Utah St U
- 1 Atmospheric Resources under Other

U of Wyoming

Table 24B Master's Degrees in Engineering, by School and Curriculum, 1970-1971 (Supplementary List)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
ALABAMA																
U of Alabama						3			4*							
ALASKA																
U of Alaska												3				
ARIZONA																
Arizona St U						4										
U of Arizona									10				1	5	8	
CALIFORNIA																
Calif Inst of Tech					1	4		5					1			
Sacramento St Coll						2										
San Jose St Coll													1			
Stanford U						12		2*				14*	12		66*	
U of Calif Berkeley			8						3*		4*			25		
U of Calif Los Angeles				51		36						31	11		34	
U of Calif San Diego		2														
U of Calif Santa Clara					14	4										
U of Southern Calif		4				3							6			
West Coast U															103	
COLORADO																
Colorado Sch of Mines					2		1		16	7						
U of Colorado					14	2										
U of Denver						1*										
CONNECTICUT																
R P I Hartford				35												
U of Bridgeport						5										
U of Connecticut		1		5												
DISTRICT OF COLUMBIA																
Catholic U of America														12		
George Washington U		4		23			3*								8*	
FLORIDA																
U of Florida								5						12		
GEORGIA																
Georgia Inst of Tech			3					14*						19		2
HAWAII																
U of Hawaii											9*					
IDAHO																
Idaho St U														2		
U of Idaho									3							
ILLINOIS																
Bradley U						3						14*				
Illinois Inst of Tech						4		2								
Midwest Coll of Engrg												11*				
Northwestern U		1		4	4			3					15	3		
U of Illinois-Urbana	13		3	22		15		3*						13		
U of Illinois-Chicago		26*				15										
INDIANA																
Purdue U														10		

Table 24B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
IOWA																
Iowa St U		2	1			2								2		
U of Iowa						6										
KANSAS																
Kansas St U						5								6		
U of Kansas	1					5		17*								
Wichita St U						2										
KENTUCKY																
U of Kentucky						2										
LOUISIANA																
Louisiana St U														2		
Tulane U															2*	
MAINE																
U of Maine															1	
MARYLAND																
Johns Hopkins U				2		2		2				28			4*	
Loyola Coll							8									
MASSACHUSETTS																
Harvard U					26		14									
Lowell Tech Inst																
M I T											27*	101		24		1
Northeastern U																
U of Massachusetts								2					1			
Worcester Poly Inst																
MICHIGAN																
Michigan St U				4		4									8	
Michigan Tech U						3			2					2		
U of Michigan		7		40*		8		4			23*		2	19		
MINNESOTA																
U of Minnesota									1*							
MISSISSIPPI																
Mississippi St U													4			
MISSOURI																
U of Missouri-Columbia														5		
U of Missouri-Rolla			5			12		3	3			128		3		
Washington U		1			29*	1		6					1			
MONTANA																
Mont Mineral Sci & Tech									2							
NEBRASKA																
U of Nebraska						4										
NEVADA																
U of Nevada								1*		2				2		
NEW JERSEY																
Fairleigh Dickinson U												3				
Rutgers U			3*					2					3*			
Stevens Inst of Tech											11*					

Table 24B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
NEW MEXICO																
U of New Mexico														9		
NEW YORK																
Columbia U						1			3*					5		
@Cornell U				5		1	9						7			
L I U - C W Post												120				
Manhattan U								11								
New York U						5								4	86*	
Poly Inst of Brooklyn		9				6							7*		63*	
@R P I - Troy		3				4		8				3	9	6		
SUNY Buffalo														1		
SUNY Coll Ceramics Alfred			3													
SUNY Stony Brook					17	1							7			
U of Rochester													3			
NORTH CAROLINA																
North Carolina St U													6	9	1*	
OHIO																
Air Force Inst of Tech							18							9		
Case Western Reserve U		4		7									8*		9*	
Cleveland St U						2										
Ohio St U			5			2								8		
U of Cincinnati														11		
U of Dayton												20				
Wright St U															1	
OKLAHOMA																
U of Oklahoma							2	27								
U of Tulsa					5		5									
OREGON																
Oregon St U														2		
PENNSYLVANIA																
Carnegie Mellon U		2												12		
Drexel U		7				5		10				23				
Pennsylvania St U	6		2			4								10		
PMC Colleges															5	
U of Pennsylvania						4										
RHODE ISLAND																
Brown U													3			
U of Rhode Island											11*					
SOUTH CAROLINA																
Clemson U		2	5			1		8*					1			
TENNESSEE																
Tennessee Tech U						6									3	
U of Tenn Knoxville						3								7		
Vanderbilt U								9*				7	2			
TEXAS																
@Rice								1								
St. Mary's U												8*				
Southern Methodist U						2						21*			44	
Texas A & M U				47										12		
U of Texas Arlington						10										
U of Texas Austin	1					6		19							9*	

Table 24B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
UTAH																
U of Utah				2								46*				
VIRGINIA																
Inst of Textile Tech																9
U of Virginia				3	7	4					3			14		
Virginia Poly Inst			2			4		11*								
WASHINGTON																
U of Washington			5											20		
Washington St U													2			
WEST VIRGINIA																
West Virginia U						1										
WISCONSIN																
Milwaukee Sch of Engrg												18				
U of Wisconsin-Madison						6								11		
WYOMING																
U of Wyoming		2						2*								
PUERTO RICO																
U of Puerto Rico														7		
TOTALS:	21	77	45	250	119	247	60	177	47	9	88	599	113	323	455	12

@Indicates school has curricula accredited by ECPD at master's level.
*The following master's degrees are included under the category indicated:

U of Alabama
4 Mineral Engrg under Geological
Stanford U
2 Hydrology under Environmental
14 Engrg Economic Syst under Management
66 Operations Research under Systems
U of Calif Berkeley
3 Engrg Geoscience under Geological
4 Naval Architecture under Marine
U of Denver
1 Mech Sciences and Environ Engrg under Engrg Mechanics
George Washington U
3 Thermal Science under Engrg Physics
8 Operations Research under Systems
Georgia Inst of Tech
14 Sanitary Engrg under Environmental
U of Hawaii
9 Ocean Engrg under Marine
Bradley U
14 Engrg Administration under Management
Midwest Coll of Engrg
11 Engrg Administration under Management
U of Illinois Urbana
3 Sanitary Engrg under Environmental
U of Illinois Chicago
26 Inf E and Bioengrg under Biological
U of Kansas
9 Environmental Health Engrg under Environmental
5 Environmental Health Science under Environmental
Tulane U
3 Water Resources Engrg under Environmental
Johns Hopkins U
2 Operations Research under Systems
MIT
4 Oper Res and Indust Engrg under Systems
27 Ocean under Marine
U of Michigan
40 Comp, Info and Control Engrg under Computer
23 Naval Arch and Marine Engrg under Marine
U of Minnesota
1 Mineral Engrg under Geological
Washington U
29 Appl Math and Comp Sci under Engrg Mathematics
U of Nevada
1 Hydrology under Environmental
Rutgers U
2 Ceramic Science under Ceramic
3 Mechs and Mat Sci under Materials
Stevens Inst of Tech
11 Ocean Engrg under Marine
Columbia U
3 Mineral under Geological
New York U
86 Operations Research under Systems
Poly Inst of Brooklyn
7 Polymeric Materials under Materials
62 Operations Research under Systems
North Carolina St U
1 Operations Research under Systems
Case Western Reserve U
8 Macromolecular Engrg under Materials
U of Rhode Island
11 Ocean Engrg under Marine
Clemson U
2 Water Resources Engrg under Environmental
Vanderbilt U
9 Resources Engrg under Environmental
St. Marys U
8 Engrg Administration under Management
Southern Methodist U
21 Engrg Administration under Management
U of Texas Austin
9 Operations Research under Systems
U of Utah
46 Engrg Administration under Management
Virginia Poly Inst
11 Sanitary Engrg under Environmental
U of Wyoming
2 Water Resources under Environmental

Table 25 Engineer Degrees in Engineering, by School and Curriculum, 1970-1971

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
ALABAMA																	
U of Alabama													1*	1	0	0	0
ARIZONA																	
U of Arizona										2	2		2*	6	0	0	0
CALIFORNIA																	
Calif. Inst of Tech	3				1									4	0	0	0
Stanford U	5			6	10			2	3			1	1*	28	0	6	0
U.S. Navy Post-Grad Sch	1				16				2					19	0	0	0
U of Southern Calif	4			5	5			1	13			1		29	1	0	NA
COLORADO																	
Colorado St U				1										1	0	NA	NA
DISTRICT OF COLUMBIA																	
George Washington U								66						66	0	0	NA
FLORIDA																	
U of Florida					1		2	1	1					5	NA	NA	NA
IDAHO																	
U of Idaho				1										1	0	0	0
ILLINOIS																	
Midwest Coll of Engrg					2									2	0	0	0
MASSACHUSETTS																	
M I T	5		6	8	51				14	1			28*	113	1		0
MONTANA																	
Mont Mineral Sci & Tech							1			1	2		3*	7			
NEW YORK																	
Columbia U				2	8			8			1		1*	20	0	NA	NA
Poly Inst of Brooklyn	2			1									1*	4	0		
NORTH CAROLINA																	
North Carolina St U				4	1				3				5*	13	0	NA	NA
OHIO																	
Ohio St U				10				1	1					12			NA
PENNSYLVANIA																	
Pennsylvania St U				15		21	97						5*	138	0	NA	NA
TEXAS																	
Southern Methodist U				2	9				1					12	0	3	0
UTAH																	
U of Utah			3	6	1				3					13	0	13	0
TOTALS:	20	0	9	61	105	21	100	79	41	4	5	2	47	494	2	22	0

*The following engineer degrees are included under "Other":

U of Alabama	1 Educational Spec in Engrg
U of Arizona	2 Geological Engrg
Stanford U	1 Applied Mechanics
MIT	27 Ocean
	1 Nuclear Engrg
Mont Mineral Sci & Tech	1 Geological Engrg
	2 Mineral Dressing Engrg
Columbia U	1 Engrg Mechanics
Poly Inst of Brooklyn	1 Applied Mechanics
North Carolina St U	5 Nuclear Engrg
Pennsylvania St U	2 Engrg Mechanics
	2 Nuclear Engrg
	1 Sanitary Engrg

Table 26A Doctor's Degrees in Engineering, by School and Curriculum, 1970-1971

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
ALABAMA																	
Auburn U		1			6				2					9	0	2	0
U of Alabama			2	2	1				2				2	9	0	0	0
ARIZONA																	
Arizona St U						20								20	0	0	0
U of Arizona			3	6	12				5	1			14	41	0	3	0
ARKANSAS																	
U of Arkansas				1	1		2		4					8	0	1	0
CALIFORNIA																	
Calif Inst of Tech	5		6	4	8		4		5				10	42	0	14	0
Stanford U	27		5	14	59			5	12			4	44	170	2	45	0
U.S. Naval Post-Grad Sch					1				1					2	0	0	0
U of Calif Berkeley			16	39	30			7	38	9			22	161	1	80	0
U of Calif Davis		2	2	7			6		2					19	0	2	0
U of Calif Irvine					4									4			
U of Calif Los Angeles					4	22*			14*				33	73	1	20	NA
U of Calif San Diego							15						2	17	1	10	0
U of Calif Santa Barbara			1		11				1					13	0	3	0
U of Santa Clara					5									5	0	1	0
U of Southern Calif	5		3	7	30			3	3			2	5	58	1	7	NA
COLORADO																	
Colorado Sch of Mines			8							4	1		3	16	0	5	0
Colorado St U		2		10	2				3					17	0	NA	NA
U of Colorado	3		4	6	9				2				3	27	NA	NA	NA
U of Denver					7					5			3	15			
CONNECTICUT																	
U of Connecticut	2		2	1	3				9				3	20	0	2	0
Yale U						33								33	1	11	NA
DELAWARE																	
U of Delaware			5	4	1				5					15	0	6	0
DISTRICT OF COLUMBIA																	
Catholic U of America	4			4	3				9				1	21	0	5	0
George Washington U					1			1	1				2	5	0	1	NA
FLORIDA																	
U of Florida	1		5	2	11			4	6	8			7	44	NA	NA	NA
GEORGIA																	
Georgia Inst of Tech	8		6	4	12		3	5	3	2			7	50	2	15	NA
HAWAII																	
U of Hawaii					4									4	0	3	0
IDAHO																	
U of Idaho		1	4											5	0	1	0
ILLINOIS																	
Illinois Inst of Tech			4	1	11			1	6	6		1*	9	39	1	14	NA
Northwestern U			7	20*	12			13	12				28	92	1	29	0
U of Illinois-Chicago													1*	1			
U of Illinois-Urbana	7	3	15	31	31				11	11	1		26	136	NA	18	NA

Table 26A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
INDIANA																	
Purdue U	7	6	13	12	29			10	29	5			5	116	2	26	0
U of Notre Dame	2		2	1	4		1							10			
IOWA																	
Iowa St U		2	5	4	9			1		4			9	34	0	NA	NA
U of Iowa			2	2	4			1	3				17	29		15	1
KANSAS																	
Kansas St U			3		2			1	1				3	10		5	
U of Kansas			4		7	4						1	9	25	0	4	0
KENTUCKY																	
U of Kentucky		1		3					4	1				9	0	3	0
U of Louisville			1											1	0	0	0
LOUISIANA																	
L S U Baton Rouge			7				2		4					13	NA	NA	NA
Louisiana Tech U			1											1	0	0	0
Tulane U			4		1				5					10		1	
MARYLAND																	
Johns Hopkins U			1		16								12	29	1	NA	NA
U of Maryland	1		17	2	9				8					37		8	
MASSACHUSETTS																	
Harvard U						11							28	39	2	12	1
MIT	14		17	29	49				24	27			15	175	0		3
Northeastern U			1		3				2					6	0	NA	NA
Tufts U			3											3			
U of Massachusetts			3	3	2			4	3				1	16	0	5	0
Worcester Poly Inst			1		3				5				1	10			
MICHIGAN																	
Michigan St U		5	1	2	5				6	2			8	29	0	7	0
Michigan Tech U										1			3	4			
U of Detroit						6								6	0	1	0
U of Michigan	7		7	12	20			4	9	3			30	92	1	0	0
Wayne St U			2						1	1				4	0	NA	0
MINNESOTA																	
U of Minnesota	3	1	14	4	16				20	7			4	69			
MISSISSIPPI																	
Mississippi St U		1			4									5	0	0	0
U of Mississippi							1							1	0	1	0
MISSOURI																	
U of Missouri-Columbia				2	12				1					15	0	6	0
U of Missouri-Rolla			4	2	4				6	5	1	1	4	27			
Washington U			5	2	4				3				11*	25	1	8	0
MONTANA																	
Mont Mineral Sci & Tech												1		1	0	0	0
Montana St U			4		6									10	0	2	0
NEBRASKA																	
U of Nebraska-Lincoln			1		1				1				2	5	NA	NA	NA

Table 26A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
NEVADA																	
U of Nevada-Reno													2	2	NA	NA	NA
NEW HAMPSHIRE																	
Dartmouth College						6								6	0	1	0
NEW JERSEY																	
Newark Coll of Engrg					3				4					7			
Princeton U	24		10	9	13									56	0	24	NA
Rutgers U				5	1				3				10	19	0	NA	NA
Stevens Inst of Tech			4		6				4					14	0	4	0
NEW MEXICO																	
N M Inst Mining & Tech										1				1	0	1	0
New Mexico St U				3	2				4					9	0	3	0
U of New Mexico			1	5	7				2				4	19	0	4	1
NEW YORK																	
City Coll CUNY			2	1	2				1					6	0	0	0
Clarkson Coll of Tech			1											1	0	1	0
Columbia U			3	7	14			1	5		4		7	41	0	NA	NA
Cooper Union						1*								1	0	0	0
Cornell U	7	7	2	17	16			3	3				42	97	0	NA	0
New York U	5		9	11	16		1	4	4	3			13	66	1	13	
Poly Inst of Brooklyn	3		3	2*	19				2				22*	51	4		
R P I - Troy	2		3	1*	10*		1		6				21*	44	0	15	0
SUNY Buffalo				2	4		2	2	2				4	12	0	5	0
SUNY Coll Ceramics Alfred														4	0	2	0
SUNY Stony Brook					2								6	8			
Syracuse U			4		8				5					17	0	6	0
U of Rochester			3		9				4				3*	19		7	0
NORTH CAROLINA																	
Duke U				6	7				1					14	0	5	0
North Carolina St U		8*		2	7	10			9				12	48	0	NA	NA
U of N C Chapel Hill					3									3	0	1	0
OHIO																	
Air Force Inst Tech	15													15	0	0	1
Case Western Reserve U			3	8	8				6	15			32	72	0	17	0
Ohio St U	9	1	4	4	13			10	4	3			14	62		9	NA
Ohio U					5									5	0	1	0
U of Akron			2											2	0	0	0
U of Cincinnati	3		4	3	2				8	3			2	25			
U of Toledo							1							1			
OKLAHOMA																	
Oklahoma St U		3	6	10	7	1		8	8					43	NA	NA	NA
U of Oklahoma	1		8	5				6	3			1	2	26	0	7	0
U of Tulsa			5									3		8		1	
OREGON																	
Oregon St U		3	5	3	3					2			1	17			
PENNSYLVANIA																	
Carnegie Mellon U			9	11	22				8	4			5	59	0	14	0
Drexel U					5					2			14	21		1	
Lehigh U			3	3	3			1	2	4				16	0	7	0
Pennsylvania St U			2	5	11				6	3	1		9*	37	0	6	NA

Table 26A (Continued)

	AEROSPACE	AGRICULTURAL	CHEMICAL	CIVIL	ELECTRICAL	ENGINEERING, GENERAL	ENGINEERING SCIENCE	INDUSTRIAL	MECHANICAL	METALLURGICAL	MINING	PETROLEUM	ALL OTHER ENGINEERING	TOTAL ENGINEERING	WOMEN	FOREIGN	U.S. NEGRO
PENNSYLVANIA (cont.)																	
U of Pennsylvania			8	3	40				3	5			1	60	0	81	NA
U of Pittsburgh			2		7			4	2	4				19	0	1	0
RHODE ISLAND																	
Brown U				4	4				6				4	18	0	9	0
U of Rhode Island			1		6				1					8		2	NA
SOUTH CAROLINA																	
Clemson U		1	4		2				1				3	11	0	3	NA
U of South Carolina				2	5									7		5	
SOUTH DAKOTA																	
S D Sch of Mines & Tech					1								1	2	0	0	0
TENNESSEE																	
U of Tenn Knoxville	9		4		3		1		3	3			11	34			
Vanderbilt U			2	1	4				1				7	15	0	5	0
TEXAS																	
Rice U			8	6	9				13				2	38	0	10	0
Southern Methodist U					20				3				3	26		10	
Texas A & M U	1	4	2	11				9	5			1	3	36	0	9E	0
Texas Tech U				5	5			6	3					19	0	7	0
U of Houston			2		7			1	4					14	0		
U of Texas Arlington					2									2			
U of Texas Austin	6		5	24	8				9			4		56	0	NA	NA
UTAH																	
Brigham Young U			2											2	0	0	0
U of Utah			5		3				1				2	11	1	0	0
Utah St U		1		6	2				1					10	0	5	0
VERMONT																	
U of Vermont					1									1			
VIRGINIA																	
Inst of Textile Tech													1	1	0	1	0
U of Virginia	3		3		5				2				12	25	1	10	0
Virginia Poly Inst	4		3	2	10			4	5				12	40	NA	NA	NA
WASHINGTON																	
U of Washington	7		9	13	15				8	6			4	62	0	24	0
Washington St U							5							5	0	1	NA
WEST VIRGINIA																	
West Virginia U	3		2	7									2	14			
WISCONSIN																	
Marquette U					7									7	0	0	0
U of Wisconsin-Madison			14	10	9			2	13	2			12	62	0	NA	1
WYOMING																	
U of Wyoming					3								1	4	0	1	0
TOTALS:	198	53	393	458	895	114	45	121	479	162	8	19	695	3640	25	741	8

*The following doctor's degrees are included under the category indicated:

U of Calif Los Angeles
- 22 Engrg Systems under Engrg, General
- 14 Energy and Kinetics under Mechanical

Illinois Inst of Tech
- 1 Gas Engrg under Petroleum

Northwestern U
- 3 Transportation under Civil

U of Illinois Chicago
- 1 Solids and Fluids under Other

Washington U
- 4 Control Systems under Other

Cooper Union
- 1 Interdisciplinary under Engrg, General

Poly Inst of Brooklyn
- 1 Transportation Planning under Civil

RPI—Troy
- 1 Electric Power under Electrical
- 1 Transportation Engrg under Civil

U of Rochester
- 3 Optics under Other

North Carolina St U
- 8 Biological and Agric Engrg under Agricultural

Pennsylvania St U
- 2 Engrg Acoustics under Other

Table 26B Doctor's Degrees in Engineering, by School and Curriculum, 1970-1971 (Supplementary List)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
ALABAMA																
U of Alabama						2										
ARIZONA																
U of Arizona									4					8	2	
CALIFORNIA																
Calif Inst of Tech					2	4		2					2			
Stanford U						11		1*				6*	14		12*	
U of Calif Berkeley			6						3*		3*			10		
U of Calif Los Angeles				8		16*							2		7	
U of Calif San Diego		2									5					
U of Southern Calif																
COLORADO																
Colorado Sch of Mines									2	1						
U of Colorado					2	1										
U of Denver						3*										
CONNECTICUT																
U of Connecticut		1		2												
DISTRICT OF COLUMBIA																
Catholic U of America														1		
George Washington U				1											1*	
FLORIDA																
U of Florida								3						4		
GEORGIA																
Georgia Inst of Tech														7		
ILLINOIS																
Illinois Inst of Tech						7		2								
Northwestern U				1	6			1					17	3		
U of Illinois-Urbana			5	8		5		1*						7		
INDIANA																
Purdue U														5		
IOWA																
Iowa St U			2			4								3		
U of Iowa						17										
KANSAS																
Kansas St U						2								1		
U of Kansas						3		6*								
MARYLAND																
Johns Hopkins U		2				4		1							5*	
MASSACHUSETTS																
Harvard U					16		12									
M I T											5*			10		
U of Massachusetts								1								
Worcester Poly Inst		1														
MICHIGAN																
Michigan St U				1		4									3	
Michigan Tech U						3										
U of Michigan		3		11*		4					4*		1	7		

Table 26B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
MINNESOTA									4*							
U of Minnesota																
MISSOURI																
U of Missouri-Rolla			2				1							1		
Washington U				2		2		3								
NEBRASKA																
U of Nebraska						2										
NEVADA																
U of Nevada-Reno								2*								
NEW JERSEY																
Rutgers U			5*					1					4*			
NEW MEXICO																
U of New Mexico														4		
NEW YORK																
Columbia U									2*					5		
Cornell U				7		4	21						10			
New York U														3	10*	
Poly Inst of Brooklyn		3				3									16*	
R P I - Troy		1				5		2					13			
SUNY Coll Ceramics Alfred			4													
SUNY Stony Brook					3	3										
NORTH CAROLINA																
North Carolina St U			2			4							3	3		
OHIO																
Case Western Reserve U		8		3									8*		13	
Ohio St U			8			1			1*					4		
U of Cincinnati														2		
OKLAHOMA																
U of Oklahoma								1						1		
OREGON																
Oregon St U														1		
PENNSYLVANIA																
Carnegie Mellon U		1												4		
Drexel U		3				7		4								
Pennsylvania St U						5								2		
U of Pennsylvania						1										
RHODE ISLAND																
Brown U													4			
SOUTH CAROLINA																
Clemson U		1				2										
SOUTH DAKOTA																
S D Sch of Mines & Tech									1							
TENNESSEE																
U of Tenn Knoxville						6								5		
Vanderbilt U								4*					3			

Table 26B (Continued)

	ARCHITECTURAL	BIO-MEDICAL	CERAMIC	COMPUTER	ENGRG MATHEMATICS	ENGRG MECHANICS	ENGRG PHYSICS	ENVIRONMENTAL	GEOLOGICAL	GEOPHYSICAL	MARINE	MANAGEMENT	MATERIALS	NUCLEAR	SYSTEMS	TEXTILE
TEXAS																
Rice U								2								
Southern Methodist U						1										
Texas A & M U														3	2	
UTAH																
U of Utah		2														
VIRGINIA																
Inst of Textile Tech																1
U of Virginia					2	2	1						6	1		
Virginia Poly Inst						9							1	2		
WASHINGTON																
U of Washington			3											1		
WEST VIRGINIA																
West Virginia U						2										
WISCONSIN																
U of Wisconsin						5								7		
WYOMING																
U of Wyoming		1														
TOTALS:	0	29	37	44	31	154	35	37	17	1	17	6	88	115	71	1

*The following doctor's degrees are included under the category indicated:

Stanford U
- 1 Hydrology under Environmental
- 6 Engrg Economic Syst under Management
- 12 Operations Research under Systems

U of Calif Berkeley
- 3 Engrg Geoscience under Geological
- 3 Naval Architecture under Marine

U of Calif Los Angeles
- 16 Mechanics and Structures under Engrg Mechanics

U of Denver
- 3 Mech Sciences and Envir Engrg under Engrg Mechanics

George Washington U
- 1 Operations Research under Systems

U of Illinois Urbana
- 1 Sanitary Engrg under Environmental

U of Kansas
- 1 Environmental Health Science under Environmental
- 5 Environmental Health Engrg under Environmental

Johns Hopkins U
- 5 Oper Res and Indust Engrg under Systems

MIT
- 5 Ocean under Marine

U of Michigan
- 11 Comp, Info and Control Engrg under Computer
- 4 Naval Arch and Marine Engrg under Marine

U of Minnesota
- 4 Mineral Engrg under Geological

U of Nevada Reno
- 2 Hydrology under Environmental

Rutgers U
- 4 Ceramic Science under Ceramic
- 4 Mechs and Mat Sci under Materials

Columbia U
- 2 Mineral under Geological

New York U
- 10 Operation Research under Systems

Poly Inst of Brooklyn
- 4 Operations Research under Systems
- 9 Systems Science under Systems

Case Western Reserve U
- 8 Macromolecular Engrg under Materials

Ohio St U
- 1 Mineralogy under Geological

Vanderbilt U
- 4 Resources Engrg under Environmental

Part III. Technology Degrees—1970-71

The 1970-71 Survey

There were 22,368 associate degrees; 6,113 certificates; 5,004 bachelor's degrees; and 69 advanced degrees reported by 535 schools to the Engineering Manpower Commission in its 1970-71 survey of technology degrees. This represents a significant increase over previous years but exact comparison is impossible because of different numbers of schools reporting from year to year. (According to the latest statistics available from the U.S. Office of Education,* 22,845 degrees based on at least two but less than four years were awarded in engineering-related programs by 527 schools for the school year 1968-69.) The EMC survey also includes graduates of pre-engineering transfer programs in its statistics. These are listed under associate degrees, but such a degree may not actually be awarded in all instances.

Of the schools reporting in this year's survey, 432 awarded associate degrees, 124 awarded certificates, 87 reported bachelor's degrees, and 8 had post-baccalaureate graduates. Many schools, of course, included two or more of these degree levels in their reports.

Trends Since 1954

Because of incomplete reports for past years plus uncertainty as to the identity of all schools having technology programs, comparisons from year to year are best made by considering only the schools having at least one curriculum accredited by ECPD. Table 27 shows how the number of schools and degrees has grown since 1954. Although both numbers have increased rapidly in recent years, the average number of AS graduates per school is now only 139, the lowest it has been since these surveys were started in 1954.

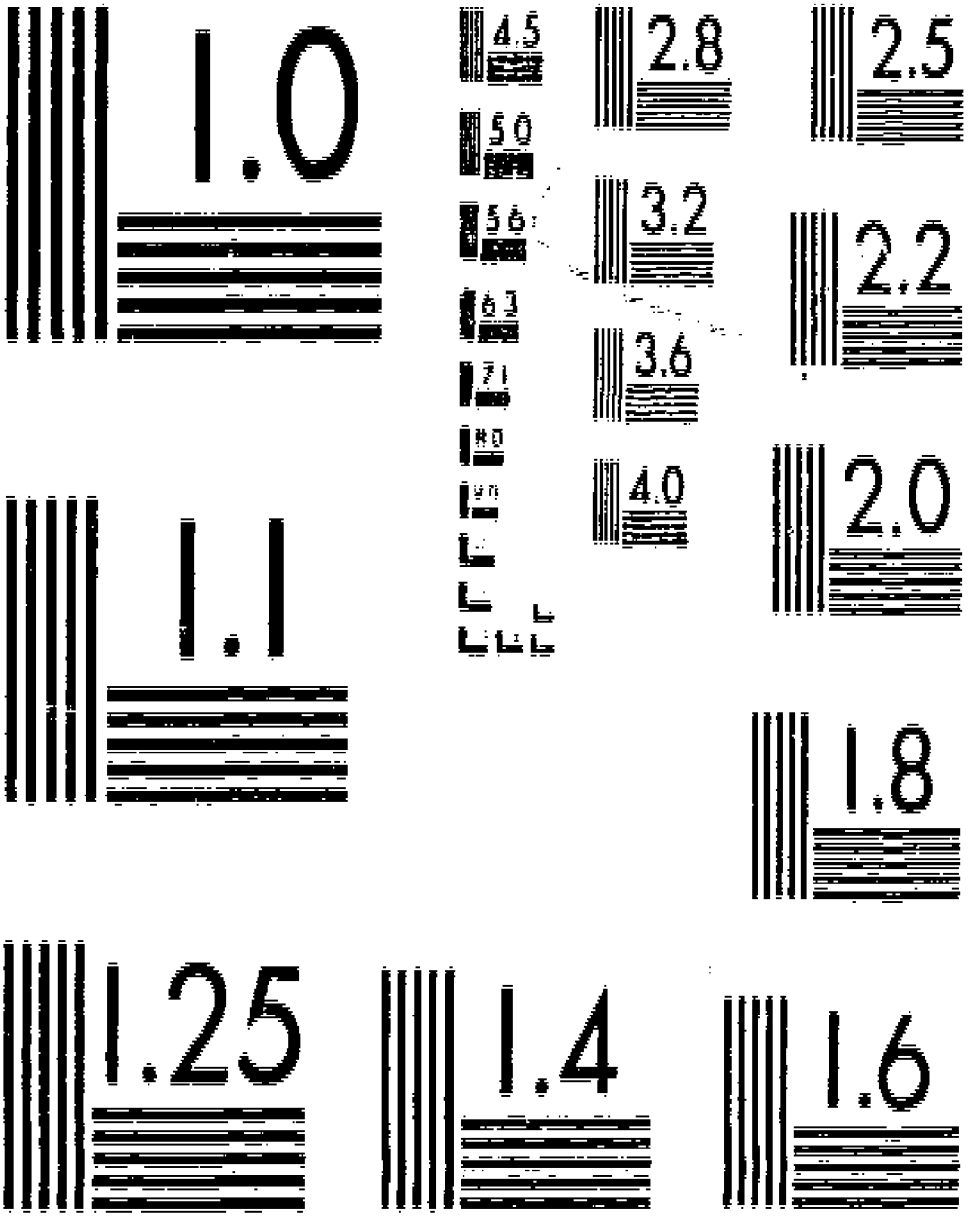
Table 27

Technology Degrees Reported by Institutions Having at Least One Curriculum Accredited by ECPD, 1954-1971[1]

Year Ended June 30	*Associate Degree Programs*[2]		*Bachelor's Degree Programs*	
	Number of Schools	*Graduates*	*Number of Schools*	*Graduates*
1971	63	8,543	11	1,144
1970	52	7,740	5	720
1969	46	6,536	2	173
1968	44	6,264	1	30
1967	38	6,144	NO SURVEY	
1966	37	5,270		
1965	33	5,695		
1964	32	5,507		
1963	32	5,489		
1962	32	6,035		
1961	33	6,284		
1960	34	7,639		
1959	35	6,478		
1958	35	5,928		
1957	NO SURVEY			
1956	29	5,499		
1955	27	4,365		
1954	27	3,927		

[1]Data for 1954-65 were gathered by Donald C. Metz et al for ASEE. Data for 1966 to date were surveyed by the EMC.
[2]Includes accredited programs leading to certificate at several schools.

**Associate Degrees and other Formal Awards below the Baccalaureate 1968-69,* OE-54045-69, U.S. Government Printing Office, June 1969.



MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

Results by Curriculum

Summary statistics for the major technology curricula are given in Table 28. Electronic technology continues to be the most popular curriculum except at the bachelor's degree level where industrial technology has the most graduates. Mechanical, electrical, civil, and drafting technology are also major curricula. The number of pre-engineering graduates has increased markedly in recent years and is now the second-largest group among the associate degree programs. This is not to imply that graduates of other curricula do not also transfer into baccalaureate programs, or that all pre-engineering students actually do enter engineering schools. Data from other sources indicate that there is great flexibility in all of these programs, with graduates pursuing a wide variety of career and educational patterns.

In interpreting Table 28, note that specialized curricula and variant titles are included in the major groups listed, such as the following:

Aircraft (includes Aviation, Aerospace, but not Aviation Electronics Technology)
Air Conditioning (includes Heating, Refrigeration Technology)
Architectural
Automotive (includes Combustion Engines, Diesel, Engine Technology, Internal Combustion, Transportation Maintenance, Truck Technology, etc.)
Chemical (includes Plastics Technology)
Civil (includes Building, Concrete, Construction, Environmental, Highway, Structural, Surveying, Urban, Water Resources Technology, etc.)

Table 28

Technology Degrees by Curriculum and Level, 1970-1971

Curriculum	*Certificate*	*Associate Degree*	*Bachelor's Degree*	*Post-Baccalaureate*
Aircraft	151	657	391	0
Air Conditioning	60	136	5	0
Architectural	59	630	26	0
Automotive	135	449	136	1
Chemical	40	397	19	0
Civil	259	2,047	354	0
Computer	51	703	59	0
Drafting	644	1,696	182	3
Electrical	269	2,295	521	0
Electronic	3,654	4,755	685	4
Industrial	102	916	1,810	56
Manufacturing	49	253	103	4
Mechanical	433	3,232	597	0
Other	207	828	116	1
Pre-engineering	—	3,374	—	—
Total	6,113	22,368	5,004	69
Women	36	369	37	0
U.S. Negroes	56	380	131	0

Computer (includes Data Processing, Numerical Control Technology)
Drafting and Design (includes Graphics, Graphic Arts Technology)
Electrical (includes Electromechanical Technology)
Electronic (includes Aviation Electronics, Broadcast, Communications, Electrical and Electronics, Radio-TV Technology)
Industrial (includes Industrial Administration, Industrial Controls, Industrial Distribution, Industrial Engineering Technology, Industrial Supervision, Industrial and Technical Education, Management, Plant Technology, etc.)
Manufacturing (includes Production, Tool Technology, etc.)
Mechanical (includes Business Machine Repair, Fluid Power, Machine, Machine Design, Machine Shop, Metal Fabrication Technology, etc.)
Other (includes Agribusiness, Agricultural, Air Pollution, Applied Arts and Sciences, Applied Marine Biology and Oceanography, Applied Technology, Audio Visual, Biomedical, Business, Ceramic, Crop and Soil, Electromedical, Engineering, Fire Protection, Fire Science, Fisheries, Food Processing, Forest, Foundry, Furniture, General, Industrial Fabrication, Instrumentation, Irrigation, Lithographic, Marine, Materials, Math Science, Metallurgy, Microprecision, Mining, Nondestructive Testing, Nuclear, Ocean, Optical, Paint, Petroleum, Photographic, Pollution Abatement, Printing, Pulp and Paper, Quality Control, Radiological, Science Laboratory, Scientific Glass, Technical Writing, Textile, Underseas, Welding, Wood Utilization, X-ray, and Other (not specified) Technology.)
Pre-engineering (includes pre-technology.)

Many of these specialized programs are specifically identified in the footnotes to Tables 29-32 which follow.

Minority Groups

The following degrees were awarded for women and U.S. Negroes:

	Associate Degree	Certificate	Bachelor's Degree
Women	369	36	37
U.S. Negroes	380	56	131

Because many schools left this part of the questionnaire blank or reported that statistics were not available, these figures cannot be considered complete. They are, however, indicative of the general magnitude of these groups in the supply of new graduates. Most of the Negro bachelor's degree graduates come from five schools—Alabama A & M U., Tuskegee Institute, Southern U., Hampton Institute, and South Carolina State College. The high ratio of bachelor's to associate degrees in the case of the Negro graduates suggests that the bachelor of technology program is particularly attractive to this minority group.

Results by School

The following schools reported more than 400 graduates at the associate level:

Miami-Dade Junior College	887	(including 642 Pre-engineering)
Pennsylvania State U	762	
Wentworth Institute	658	
Purdue U	429	

1781 certificates were reported by United Electronics Institute and 555 by Ryder Technical Institute.

Purdue U. reported the largest number of bachelor's degrees, 301, followed by Western Michigan U. with 278.

Complete breakdowns of the individual school reports are given in Table 29 for associate degrees, Table 30 for certificates, Table 31 for bachelor's degrees, and Table 32 for post-baccalaureate degrees. These tables are broken down by thirteen major curricula plus an "other" category, pre-engineering, and total columns. In addition, the numbers of women and U.S. Negroes included in the totals for each school are shown. We have made every effort to check the correctness of these tables, but in addition to any clerical errors that might have slipped by there may be disagreement as to the proper categorization of certain specialized curricula. Those included under the "other" column and many of those subsumed under other headings are asterisked in the data tables and itemized in the footnotes after each table.

Table 29 Associate Degrees in Technology, by School and Curriculum, 1970-1971

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING, DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
ALABAMA																		
Alex City St Jr Coll															20	20	0	2E
Enterprise St Jr Coll															8	8	1	0
Jefferson St Jr Coll														7	22	29	0	3
Northeast St Jr Coll															3E	3	0	0
Samford U															6E	6	0	0
ALASKA																		
Anchorage Comm Coll										10						10	NA	NA
ARIZONA																		
Arizona Western Coll				6				5		6			2	7*	6	32	0	2
Cochise Coll	30							6		8						44	4	1
+DeVry Inst of Tech										57						57	1	0
Eastern Arizona Coll				2			5	4		[illegible]			4	1*		18	0	0
Glendale Comm Coll								10		19					26	55	1	NA
Maricopa Comm Coll Dist [1]								14	22*	5						41	0	0
+Phoenix Coll						5	6			25					30	66	0	0
ARKANSAS																		
Hendrix Coll															1	1	0	0
Southern St Coll											3				19	22	0	4
Southwest Tech Inst	8		4			2	12			5			8	4*		43	4	5
CALIFORNIA																		
Allan Hancock Coll				9						4			4*	22*		39	1	NA
American River Coll								[illegible]		[illegible]			47			148	0	NA
Cabrillo Coll										12						12	0	NA
Canada Coll														15*		15	0	NA
Chabot Coll				5		9			5*	13			3*	1*		36	6	2
+City Coll of San Fran			8		6	7		10		40	15		13		26	125	7	3
+Cogswell Poly Coll						6				7			4			17	0	1
Coll of the Desert															2	2	0	0
Coll of the Redwoods						3		2		4					5	14	0	0
Coll of the Siskiyous															3	3	0	0
Diablo Valley Coll						2		8		[illegible]			2			17	NA	NA
Electronic Tech Inst										6						6	0	1
Fremont-Newark Comm Coll								4					2			6	0	0
Fullerton Jr Coll					4	16		20		46	3		12*	6*	31	138	2	NA
Gavilan Coll	6					8		5							3	22	0	0
Golden West Coll								3		4						7	0	0
+Grossmont Coll			2			1	2	3		3				4*		15	0	0
Grantham Sch of Engrg										2						2	0	0
Hartnell Comm Coll				2		7		4		3	4		2		8	30	0	NA
Humphreys Coll						1				5						6	0	0
Long Beach City Coll						1		14	9	39	37		2		36	138	0	NA
Los Angeles Pierce Coll						5		32		70	25		11		25	168	5	NA
Los Angeles Tr-Tech Coll								40	82	99			65			286	0	0
Menlo Coll															8	8	0	0
Merritt Coll					10					3						13	2	NA
Modesto Jr Coll						3		7							27	37	0	0
Mt San Antonio Coll	17					1		9	5	31	55		2			120	0	0
+Northrop Inst of Tech	16									5						21	0	2
Pasadena City Coll			26	5		12		13		24			13	17*		110	0	0
Rio Hondo Coll					11			12		5	10					38	1	0
Sacramento City Coll						3		1		17			22		54	97	1	NA
San Bernardino Val Coll						2		6							16	24	NA	NA
San Diego Comm Coll Dist [2]						8		5		35		1		22*		71	1	NA
Santa Ana Coll								1		8			17*		5	31	0	0
Santa Monica Coll								1		24		11			31	67	NA	NA

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING, DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
CALIFORNIA(continued)																		
Santa Rosa Jr Coll						23		6		14					10	53	0	0
Shasta Coll						9		2		9						20	0	0
Sierra Coll								4		8						12	0	0
Southwestern Coll			10	2						15						27	0	0
Western Sts Coll Engrg										12						12	1	2
Yuba Coll				4				2		9				5*	39	59	0	0
COLORADO																		
Arapahoe Comm Coll									8*	2						10	0	0
Fort Lewis Coll															37	37	1	0
Mesa Coll						4		4							32	40	1	0
Northeastern Jr Coll															8	8	0	0
So Colorado St Coll		10		11		9	15			23			23*	9*		100	7	3E
CONNECTICUT																		
+Hartford St Tech Coll						44	36		39			6	31	15*		171	6	2
+Norwalk St Tech Coll					7		32		73*			10	61	12*		195	7	5
+Thames Val St Tech Coll					18		19		29			24	16			106	5	1
Ward Tech Coll									27*	22						49	0	3
Waterbury St Tech Coll					8		24		76			30	49		97	284	2	3
FLORIDA																		
Central Fla Comm Coll						4				2				4*	7	17	NA	NA
Chipola Jr Coll															10	10	0	0
+Embry-Riddle Aero U	1															1	0	0
Florida A & M U							1									1	1	0
Gulf Coast Comm Coll								4		12	1				5E	22	0	0
Lake City Comm Coll						4		1							4	9	0	0
Lake Sumter Comm Coll								2	7						3E	12	0	0
Miami-Dade Jr Coll-N	70	7	6			8	63	27*	8*	44			1	11*	642	887	NA	NA
Polk Comm Coll					1	2		2		4					19	28	1	0
+St Petersburg Jr Coll										16			4		100E	120	0	0
Santa Fe Jr Coll														9*	50E	59	4E	8E
GEORGIA																		
Middle Georgia Coll															43	43	0	0
+Southern Tech Inst			47			43			44		73		46	18*		271	2	0
IDAHO																		
Boise St Coll								24		14					25E	63	0	0
Lewis-Clark St Coll								17					26			43	1	0
North Idaho Coll											3				11	14	0	0
Northwest Nazarene Coll															5	5	0	0
+Ricks Coll										12					15	27	0	0
The Coll of Idaho															1	1	0	0
ILLINOIS																		
Belleville Area Coll								2		13					10	25	0	0
Black Hawk Coll										24*			9		5	38	0	0
Bradley U											5		1			6	0	NA
Chicago Tech Coll			5			2			7				4			18	0	1
Coyne America Inst										20						20	0	5E
+DeVry Inst of Tech										254						254	NA	NA
Eastern Illinois U															23	23	0	0
Elgin Comm Coll					1*			13		7			3		4	28	2	0
Highland Comm Coll				4						2			3		2	11	0	0
Illinois Central Coll					2			5		4	7	1	3		6	28	0	0
Illinois Val Comm Coll										11			5		5	21	0	0
Industrial Engrg Coll											10					10	0	1

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING, DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
ILLINOIS (continued)																		
+Inst of Drafting & Tech						17		40								57	0	0
Kennedy-King Coll					5			4					20		15	44	0	41
Lake Land Coll						6		17		9					8	40	0	0
Malcolm X Coll											5*					5	0	2
Morton Coll										6					5	11	0	0
Olive-Harvey Coll			1			3*	1			7				1*		13	NA	NA
Parkland Coll						1				8			1	1*	3	14	0	0
Prairie St Coll			1							4			4			9	0	0
Sauk Valley Coll				4				2		2			2		1	11	0	0
Spoon River Coll						7							4			11	0	0
Triton Coll		5	1	13		1		3		8			1		4	36	0	0
Wright Coll										4			7		17	28	0	0
Wm Rainey Harper Coll			10				3*			9			10		18	50	0	0
INDIANA																		
+Indiana U-Purdue U			21		3	3	48		42		12		42			171	NA	NA
+Purdue U	76		48		9	19	72	14	108				80	3*		429	23	14
Tri-State Coll													14			14	0	0
Valparaiso Tech Inst										67						67	0	1
Wabash Coll															1	1	0	0
IOWA																		
Clinton Comm Coll								12		16						28	0	0
Des Moines Comm Coll															6	6	0	0
Ellsworth Comm Coll															5	5	0	0
Hawkeye Inst of Tech										26			18			44	0	3
Iowa Central Comm Coll										9						9	0	0
+Iowa St U					3	18				46			21			88	0	0
Iowa Western Comm Coll										6			9			15	0	0
Kirkwood Comm Coll										15			16			31	0	0
Marshalltown Comm Coll								8		2			7			17	NA	1
N Iowa Area Comm Coll								15		9						24	0	0
Southeastern Comm Coll										9			17		15	41	0	0
Waldorf Coll								4			3				1	8	0	0
KANSAS																		
Baker U															2	2	0	0
Highland Comm Coll															5	5	0	0
Hutchinson Comm Jr Coll								7	3	9			4			23	0	0
Kansas City Comm Jr Coll								8							8	16	0	0
Kansas Tech Inst	2					8	13			12			1			36	1	1
Labette Comm Jr Coll															5	5	0	0
KENTUCKY																		
Ashland Comm Coll-U Ky															11	11	0	0
Eastern Kentucky U											16				15	31	0	0
Henderson Comm Coll-U Ky						2										2	0	0
Somerset Comm Coll -U Ky						11									4	15	0	0
Southeast Comm Coll-U Ky						7										7	0	0
Western Kentucky U						7			5				4			16	0	0
LOUISIANA																		
Delgado Jr Coll	12		5			1		11		26	22		17	4*		98	1	NA
Sowela Tech Inst										5						5	0	0
MAINE																		
Eastern Maine V-T Inst				6		2			10	22			4			44	0	0
Southern Maine V-T Inst		2		3		1			1	13			2	15*		37	2	0

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING: DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
MARYLAND																		
Allegany Comm Coll					1										3	4	1	0
Anne Arundel Comm Coll			6						8				1	5*	8	28	1	0
+Capitol Inst of Tech										26						26	0	NA
Catonsville Comm Coll					1			9		13					6	29	0	0
Charles Co Comm Coll										7				5*	3	15	3	2
Comm Coll of Baltimore						6		8		16			5		13	48	1	NA
Hagerstown Jr Coll						1*			1						9	11	0	0
Harford Comm Coll				3										1*	14	18	0	0
M omery Comm Coll										16						16	0	NA
MASSACHUSETTS																		
Blue Hills Tech Inst						4	19		7*	5						35	13	1
Bristol Comm Coll						6			15*				6		5	32	0	0
Dean Jr Coll														13*		13	0	0
+Franklin Inst of Boston			26		2	15			12	39			21			115	2	1
Greenfield Comm Coll						9	1				1					11	0	0
Holyoke Comm Coll					2					5			2		8	17	0	0
Lincoln Coll of NE U						18			10	61			60			149	0	5
+Lowell Tech Inst					12*	26			1	29	4		20	1*		93	0	0
Massasoit Comm Coll										12			3		7	22	0	NA
Merrimack Coll										15						15	0	0
N Essex Comm Coll										16				9*		25	0	0
Quinsigamond Comm Coll						2				4			6		11	23	0	0
+Wentworth Inst	73		78			122			39	190		6	141	9*		658	0	3
Worcester Jr Coll															97	97	1	0
MICHIGAN																		
Alpena Comm Coll	3				1	1		9		2	1			5*		22	1	0
Bay de Noc Comm Coll								11	2						9	22	0	0
Calvin Coll															15	15	0	0
Central Michigan U															20	20	0	0
Delta Coll					7				11				19		24	61	3	0
Ferris St Coll					21	14			8	12	9					64	1	NA
Genesee Comm Coll								5		11			8			24	0	0
Gogebic Comm Coll															2	2	0	0
Henry Ford Comm Coll			2	27			10	19		19			6*	14*	19	116	3	NA
Highland Park Coll								8			32				48	88	5	NA
Kellogg Comm Cool								3		11	7		2		17	40	0	1
Lake Michigan Coll								12		7	3					22	0	0
+Lake Superior St Coll								11		5			25			41	0	0
Lansing Comm Coll			11			11		5		11	1		12	1*	12	64	0	0
Lawrence Inst of Tech					4	7				32	13		24			80	0	2
Macomb Co Comm Coll						25		48		59	13		54			199	0	0
+Michigan Tech U						68			65					72*		205	0	0
Monroe Co Comm Coll				5				10		15	5		4		5	44	0	0
Montcalm Comm Coll				8				12			1					21	0	0
N Central Michigan Coll															12	12	0	0
Northern Michigan U										2*				13*		15	0	0
Oakland Comm Coll				6						9	1		3			19	0	0
Schoolcraft Coll				5		10		8		10		2	10	3*	8	56	0	0
SW Michigan Coll	10			6				9			7					32	0	0
MINNESOTA																		
Anoka-Ramsey St Jr Coll															40E	40	0	0
Austin St Jr Coll								3						2*	8	13	0	0
Fergus Falls St Jr Coll															9	9	1	0
Mesabi St Jr Coll															18	18	2	0
Moorhead St Coll											9				26	35	0	0
N Hennepin St Jr Coll								10					1		3	14	0	0
Rochester St Jr Coll						7				9			9			25	0	0
SW Minnesota St Coll					1			1		9			12		10E	33	0	0
Vermilion St Jr Coll															3	3	0	0

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
MISSISSIPPI																		
Meridian Jr Coll										8					8	16	0	1
Ms Gulf Coast Jr Coll								4		3					10	17	0	0
NE Mississippi Jr Coll						2		2		5						9	0	0
NW Mississippi Jr Coll						6		10		10			3		6	35	0	8
Tougaloo Coll															1	1	0	1
MISSOURI																		
+Central Tech Inst										48						48	0	2
Florissant Val Comm Coll															14	14	0	0
Forest Park Comm Coll										7			7		17	31	0	7
Jefferson Coll				4		4		6		8			2			24	0	0
Linn Tech Coll	10			55			5	41		62			17*			190	1	2
Metropolitan Jr Coll Dst 3	1			6				3		9				3*	19	41	0	3
Mineral Area Coll						6		8		2				3*	3	22	0	0
Missouri Southern Coll				6			13	6								25	4	0
Missouri Western Coll							1	1		2						4	0	0
MONTANA																		
Northern Montana Coll						3				10			2			15	0	0
NEBRASKA																		
Centl Nebraska Tech Coll						2		12	1	11			3			29	0	0
Nebraska Western Coll						8									18	18	0	0
U of Nebraska-Curtis						4		11		4	3					8	0	0
U of Nebraska-Omaha						7		2		7						22	0	NA
W Nebraska Tech Coll	21		4	43												84	4	0
NEVADA																		
+Tech Inst-U of Nevada			13							8						21	0	0
NEW HAMPSHIRE																		
New England Aero Inst	19										2					21	0	1
+New Hampshire Tech Inst									3	53			31			87	2	0
NH V-T Coll-Manchester								22	16	17	53		25			133	0	0
NH V-T Coll-Portsmouth								19		14						33	0	0
NEW JERSEY																		
County Coll of Morris										16			6			22	0	0
Mercer Co Comm Coll						8		26	16	14			6		21	91	0	2
Middlesex Co Coll							26		25				18		1	70	8	0
Ocean Co Coll						7				4					9	20	0	0
Union Coll															4	4	1	0
NEW MEXICO																		
+Eastern New Mexico U						3		4		5						12	0	0
New Mexico Jr Coll								7		3			1			11	2	NA
+N Mex St U-Las Cruces						6				10			8			24	1	0
NEW YORK																		
+Academy of Aeronautics	220															220	NA	NA
Adirondack Comm Coll								13							5	18	0	0
Auburn Coll Coll				2						11					2	15	1	0
+Bronx Comm Coll-CUNY				16*					29				13		37	95	1	NA
+Broome Comm Coll				14		23			32		17		35		33	154	1	0
Dutchess Comm Coll			19						24				13		6	62	0	0
+Erie Comm Coll				27		71			60		23		51	26*	10	268	5	3
Fulton-Mont Comm Coll									14						2	16	0	0
+Hudson Valley Comm Coll		10		14	6	70*			64			8	18			190	NA	NA
Jamestown Comm Coll										15			9		8	32	0	0

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
NEW YORK (continued)																		
Jefferson Comm Coll															5	5	0	0
+Mohawk Valley Comm Coll						52			65				41		29	187	1	2
Monroe Comm Coll						7			35				27	19*		88	0	0
Nassau Comm Coll						16					7			8*	24	55	1	NA
New York City Comm Coll					37	77		25	20*	75			58			292	13	NA
New York Inst of Tech									3				2			5	0	NA
Niagara Co Comm Coll									11				18	9*		38	2	0
Orange Co Comm Coll						24			15				9			48	NA	NA
Queens Coll-CUNY															28	28	0	1
+Queensborough Comm Coll							25			62			20		37	144	2	14E
+RCA Insts [4]										256						256	NA	NA
Rochester Inst of Tech									17				21			38	0	0
Rockland Comm Coll															11	11	3	0
+SUNY A&T Coll-Alfred		22		19	11	42		32	10	14	22		15	18*	26	231	12	NA
+SUNY A&T Coll-Canton		16		33		28			23				19		16	135	0	1
SUNY A&T Coll-Cobleskill														17*		17	0	0
SUNY A&T Coll-Delhi			12			53							2	6*	17	90	1	0
+SUNY A&T Coll-Farmingdle	30	12		30	12	63			73				43	14*	75	352	8	NA
Staten Island Comm Coll						15			37*				28		32	112	0	NA
Sullivan Co Comm Coll						3										3	0	0
Voorhees Tech Inst		8	10	18		7	21			18			8	8*		98	2	12
Westchester Comm Coll					6	21			53				16		18	114	1	3
NORTH CAROLINA																		
Ashville-Buncom Tech Inst					2	8		12		16	8		1			47	0	3
Brevard Coll															8	8	0	0
Catawba Valley Tech Inst			11						3*	12			6	19*		51	1	5
Central Carolina Tech								5		3						8	1	0
Centl Piedmont Comm Coll			6		2	11			8	9		9	15			60	0	0
Coll of the Albemarle								4		7						11	2	0
Davidson Co Comm Coll									2				12		3	17	1	0
Durham Tech Inst										3			5			8	0	1
+Fayetteville Tech Inst		10				26*				20			19			75	1	3
+Gaston Coll						21			7	14	8		10		3	63	0	1
Guilford Tech Inst			3			3				9			1			16	0	3
Isothermal Comm Coll										5					2	7	0	0
Lenoir Comm Coll								7		19			4		1	31	5	1
Pitt Tech Inst									9				5			14	0	1
Richmond Tech Inst										6			6			12	0	1
Rowan Tech Inst								3		13		4		7*		27	1	0
Surry Comm Coll								1		3					4	8	0	0
Tech Inst of Alamance					3			7		7						17	0	1
Wayne Comm Coll								7		9						16	0	2
Wilkes Comm Coll						3	12				11			11*		37	NA	6
Wilson Co Tech Inst								14		7			8			29	0	2
Wingate Coll															34	34	0	1
NORTH DAKOTA																		
Bismarck Jr Coll															15	15	0	0
ND St Sch of Science						18		47	48	46			12			171	0	0
OHIO																		
American Tech Inst			12							8			76			96	0	4
Bowling Green St U															15E	15	0	3E
Clark Co Tech Inst						7		1	20				16			44	0	1
Columbus Tech Inst					5			15		49			16	2*		87	1	4
Cuyahoga Comm Coll			17							35			19		15E	86	0	13E
Franklin U								20		9						29	0	2

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING, DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
OHIO (continued)																		
ITT Tech Inst - Dayton												119				119	1	0
Kent St U-Ashtabula									7		2		8		2	19	0	0
Kent St U-Salem						10			15*		4		14			43	0	0
Lakeland Comm Coll										7	1		7			15	0	0
Lorain Co Comm Coll					4	15		12	15		4		12			62	0	0
Miami U-Oxford											4				6	10	NA	NA
N Central Ohio Tech Inst									7		2		16			25	0	1
+Ohio Coll of App Science			21		11	27		18	16	13			28			134	7	NA
+Ohio Inst of Tech										125E						125	0	1
+Sinclair Comm Coll										11			12			23	0	0
Stark St Tech Inst									15				13			28	0	0
Tri-County Tech Inst										22		4	5	10*		41	NA	NA
+U of Akron Comm & Tech					5	7				28	20		21	3*		84	2	1
+U of Dayton Tech Inst					6					34	10		35			85	0	2
U of Toledo			8		6	17		6		12	12		22			83	1	0
OKLAHOMA																		
Cameron Coll								10		3						13	0	0
Connors St Coll								7							7	14	4	0
E Oklahoma St Coll					1	9		9		16			24		20E	79	0	0
N Oklahoma Coll								6		4			1		15	26	0	0
OSU Tech Inst-Okla City						5	21	1		25	10			4*		66	NA	6
OSU Tech Inst-Okmulgee								47	34	35						116	0	0
+OSU Tech Inst-Stillwater	11					9		10		19			11	46*		106	4	2
OREGON																		
+Blue Mountain Comm Coll						8				5	17					30	0	0
Central Oregon Comm Coll							1						15*	13*		29	0	0
Chemeketa Comm Coll						10		18		18	19		6			71	0	0
Clatsop Coll						3		2		3			3	25*	5	41	7	0
Mt Hood Comm Coll					5	8		8	2	14*			6	18*	2	63	1	0
+Oregon Tech Inst						53		10	12*	44	92		22			233	25	0
Portland Comm Coll						12		14		39			25			90	0	0
Umpqua Comm Coll						5										5	0	0
Willamette U															6	6	0	0
PENNSYLVANIA																		
Bucks Co Comm Coll										25					10	35	0	0
Butler Co Comm Coll								12		12						24	0	NA
Comm Coll-Allegheny Co						2		17		9					16	44	2	5
Comm Coll-Philadelphia			2		1	9				8					6	26	0	5
Dean Inst of Tech						15		25	12					6*		58	0	0
Delaware Co Comm Coll								1					3		7	11	0	0
Dickinson Coll															1	1	0	0
Harrisburg Comm Coll						11		15	4*	13					38	81	0	NA
Industrial Mgt Inst											31					31	0	4
King's Coll															1	1	0	0
Lehigh Co Comm Coll					3					15			14		6	38	1	0
Lincoln U															1	1	0	0
Luzerne Co Comm Coll			7							2			17			26	0	0
Montgomery Co Comm Coll														2*		2	0	0
Moravian Coll															1	1	0	0
N'hampton Co Comm Coll								7		15					5	27	2	1
+Pennsylvania St U					29	38			330				350	15*		762	3	30
Penn Tech Inst										100						100	0	NA
Point Park Coll								8		6			2			16	0	0
+Spring Garden Coll						10				19	30		37			96	0	0
+Temple U Tech Inst		1	51		7					39			52	2*		152	1	12E

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING, DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
PENNSYLVANIA (continued)															2	2	1	0
Waynesburg Coll															8	8	2	0
York Coll of Pa																		
RHODE ISLAND																		
Rhode Island Jr Coll					1					13	1		6		9	30	0	NA
SOUTH CAROLINA																		
Greenville Tech Ed Cntr					11			12		13	17		15	13*		81	6	NA
+Midlands Tech Ed Cntr			6		2	14			4	11	3	17	12			69	0	0
Piedmont Tech Ed Cntr								8		8	7					23	0	0
Spartanburg Tech Ed Cntr								3		9	2					14	0	1
Sumter Area Tech Ed Cntr						24*										24	3	4
Tri-Co Tech Ed Cntr						4		8		12	16					40	1	4
SOUTH DAKOTA																		
Augustana Coll															2	2	0	0
Southern St Coll								18		21						39	0	0
TENNESSEE																		
Carson-Newman Coll															2	2	0	0
+Chattanooga St Tech Inst					3	4	32		5	9	4		11	5*		73	10	2
Columbia St Comm Coll						10		1		4			3		4	22	0	1
David Lipscomb Coll															2	2	0	0
Middle Tennessee St U															1	1	0	0
TEXAS																		
Amarillo Coll								3		10						13	0	0
Baylor U															1	1	0	0
+Del Mar Coll		6	9					5	8	20				4*		52	0	2
Frank Phillips Coll															6	6	0	0
Grayson Co Coll				8			5	11		5*					5	34	0	0
Hill Jr Coll									2				6		6	14	0	1
Howard Co Jr Coll								6					2			8	0	0
Lee Coll				2	1			1		11				1*	5	21	0	1
San Antonio Coll								12	9							21	0	0
San Jacinto Coll	10	7					10	3		14				6*		50	5E	5E
South Plains Coll							33	11					6	11*		61	13	6
Tarrant Co Jr Coll			9					5		8						22	0	0
Temple Jr Coll								1							7	8	0	0
Texarkana Coll	2						4									6	0	0
U of Houston						1		4	1	7		1				14	1	NA
+U of Texas-Arlington	9					1			45				21			76	NA	NA
Wharton Co Jr Coll				8			9	7		11			8	11*	8	62	18E	8E
UTAH																		
+Brigham Young U					1	1	1	1		17						21	0	0
Snow Coll															9	9	0	0
U of Utah							6			3			3			12	0	0
Utah Tech Coll-Salt Lake							23	28		67						118	3	1
+Weber St Coll							1	5		11						17	1	NA
VERMONT																		
+Vermont Tech Coll			20			22			18*	38			24			122	2	NA
VIRGINIA																		
Blue Ridge Comm Coll								5		6	4				2	17	0	0
Cenil Virginia Comm Coll										6			2			8	0	0
Danville Comm Coll										6					3	9	0	0
DS Lancaster Comm Coll								8		4						12	0	0
John Tyler Comm Coll			5					1		8			5		2	21	0	1

Table 29 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING: DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
VIRGINIA (continued)																		
George Mason Coll															7	7	0	0
N Virginia Comm Coll			3	6		5				22			3		5	44	0	0
+Old Dominion U						3		3		5			5			16	0	0
Tidewater Comm Coll								3								3	0	0
Virginia Commonwealth U		7				12		27		18						64	NA	NA
Virginia W Comm Coll			10							22			9		3	44	0	1
Wytheville Comm Coll						11*		5			5				8	29	1	0
WASHINGTON																		
Cntl Washington St Coll															8	8	0	0
Centralia Coll						9				7						16	0	0
Green River Comm Coll						4		8		16			4	20*	4	56	0	0
Highline Comm Coll						7							5	4*	11	27	0	0
Lower Columbia Coll										6			6		1	13	0	0
North Seattle Comm Coll										17						17	0	NA
Olympia V-T Inst						3										3	0	0
Pacific Lutheran U															1	1	0	0
Shoreline Comm Coll						10		12	27				2	1*	69	121	0	0
Skagit Valley Coll						9			21				8	1*	7	46	0	0
Yakima Valley Coll						8				9					16	33	0	2
WEST VIRGINIA																		
Bluefield St Coll			6			8			18				6		5	43	0	
Fairmont St Coll									1					1*		2	0	0
Potomac St Coll							15								3	18	0	0
West Virginia Inst Tech					2	13		6	39				12			72	0	0
WISCONSIN																		
Black Hawk V-T Schs															18	18	0	0
District One Tech Inst						11		14		8						33	0	0
Kenosha Tech Inst				12			27	13					15*			67	8	NA
Lakeshore Tech Inst										9			9			18	0	0
Mid-State Tech Inst						11				3			5			19	0	0
Milwaukee Area Tech Sch		5		13	14	22		20	60				34*	43*		211	0	10
+Milwaukee Sch of Engrg		3	10	10	1		15		3	30	6		10*	4*		92	0	1
Moraine Park Tech Inst											23					23	0	0
North Central Tech Inst			27	20						32			19			98	0	0
NE Wisconsin Tech Inst			11			28							13	10*		62	0	0
Racine Tech Inst						4		8		9			15	9*		45	0	0
Superior Tech Inst								2		8						10	0	0
Waukesha Co Tech Inst										12			14			26	0	0
W Wisconsin Tech Inst		5		6			15	11	6	13			8	2*		66	0	0
WSU-Stevens Point															10	10	0	0
WYOMING																		
Casper Coll								5		4				2*	15	26	0	0
Eastern Wyoming Coll															5	5	0	0
Western Wyoming Coll															7	7	0	0
PUERTO RICO																		
U of Puerto Rico						50		14	27				20			111	NA	NA
TOTALS:	657	136	630	449	397	2047	703	1696	2295	4755	916	253	3232	828	3374	22368	369	380

(See footnotes for this table on page 68.)

Table 29 (Continued)

1 Data for Glendale and Phoenix Colleges have been subtracted.
2 Includes San Diego City Coll, Mesa Coll, San Diego Evening Coll.
3 Longview, Maple Woods, Penn Valley Comm Colleges.
4 These degrees were reported as certificates but are classified as associate degrees for this report.
+ Indicates school having at least one curriculum accredited at 2-year level by ECPD.
*The following associate degrees are included under the category indicated:

Jefferson St Jr Coll	7 Engrg Tech under Other
Arizona Western Coll	7 Welding Tech under Other
Eastern Arizona Coll	1 Mining Tech under Other
Maricopa Comm Coll Dist	22 Electro-Mechanical Tech under Electrical
Southwest Tech Inst	4 Instrumentation under Other
Allan Hancock Coll	4 Machine Tech under Mechanical
	2 Engineering under Other
	20 Quality Tech under Other
Chabot Coll	5 Electro-Mechanical Draft & Engrg under Electrical
	3 Machine under Mechanical
	1 Welding under Other
Fullerton Jr. Coll	3 Machine Shop under Mechanical
	9 Metal Fabrication under Mechanical
	6 Metallurgy under Other
Grossmont Coll	4 Biomedical under Other
Pasadena City Coll	17 Fire Science under Other
San Diego Comm Coll Dist	4 Engr Tech under Other
	18 Marine Tech under Other
Yuba Coll	4 Applied Arts and Sci under Other
	1 Welding Tech under Other
Arapahoe Comm Coll	8 Electromechanical Tech under Electrical
So Colorado St Coll	7 Machine Shop under Mechanical
	9 Welding under Other
Hartford St Tech Coll	15 Nuclear Tech under Other
Norwalk St Tech Coll	12 Electromechanical Tech under Electrical
	12 Materials Tech under Other
Ward Tech Coll	27 Electromechanical Tech under Electrical
Central Fla Comm Coll	4 Agribusiness Tech under Other
Miami-Dade Jr Coll-N	16 Graphic Arts Tech under Drafting
	8 Radio-Television Tech under Electronic
	3 Instrumentation under Other
	8 Marine Science under Other
Sante Fe Jr Coll	9 Air Pollution under Other
Southern Tech Inst	18 Textile Engrg Tech under Other
Black Hawk Coll	4 Radio and TV Engrg Tech under Electronic
Elgin Comm Coll	1 Plastics Tech under Chemical
Malcolm X Coll	5 Plant Engrg under Industrial
Olive-Harvey Coll	3 Envir Control Tech under Civil
	1 Paint Tech under Other
Parkland Coll	1 Micro-Precision Tech under Other
Wm Rainey Harper Coll	3 Numerical Control under Computer
Purdue U	2 Foundry Tech under Other
	1 Metallurgical Tech under Other
Delgado Jr Coll	2 Fire Protection under Other
	2 Petroleum under Other
Southern Maine V-T Inst	11 Appl Marine Biol and Oceanog under Other
	4 Marine Science under Other
Anne Arundel Comm Coll	5 Ocean Engrg Tech under Other
Charles Co Comm Coll	5 Pollution Abatement Tech under Other
Hagerstown Jr Coll	1 Surveying Tech under Civil
Harford Comm Coll	1 Science Lab Tech under Other
Blue Hills Tech Inst	7 Electro-Mechanical Tech under Electrical
Bristol Comm Coll	10 Electro-Mechanical Tech under Electrical
Dean Jr Coll	13 Math Science under Other
Lowell Tech Inst	1 Plastics Engrg Tech under Chemical
	1 Radiological Health Tech under Other
N Essex Comm Coll	9 Engrg Science under Other
Wentworth Inst	3 Materials Engrg Tech under Other
	6 Nuclear Engrg Tech under Other
Alpena Comm Coll	1 Fisheries Tech under Other
	4 Forest Tech under Other
Henry Ford Comm Coll	6 Machine Tool Tech under Mechanical
	14 Metallurgy Tech under Other
Lansing Comm Coll	1 Fire Science under Other
Michigan Tech U	72 Forest Tech under Other
Northern Michigan U	2 Broadcasting Spec under Electronic
	13 X-ray Tech under Other
Schoolcraft Coll	1 Electromedical Tech under Other
	1 Indust Fabrication and Weld Tech under Other
	1 Metallurgy under Other
Austin St Jr Coll	2 General Tech under Other
Linn Tech Coll	17 Machine Tool Tech under Mechanical
Metropolitan Jr Coll Dst	3 Engrg Tech (Gen) under Other
Mineral Area Coll	3 Applied Tech under Other
Bronx Comm Coll-CUNY	10 Plastics Tech under Chemical
Erie Comm Coll	26 Metallurgical Tech under Other
Hudson Valley Comm Coll	2 Environmental Tech under Civil
Monroe Comm Coll	3 Bio-Med Engrg Tech under Other
	3 Instrumentation Tech under Other
	6 Optical Tech under Other
	7 X-ray Tech under Other
Nassau Comm Coll	8 Instrumental Tech under Other
New York City Comm Coll	20 Electromechanical Tech under Electrical
Niagara Co Comm Coll	9 Science Lab Tech under Other
SUNY A&T Coll-Alfred	18 Audio-Visual Tech under Other
SUNY A&T Coll-Cobleskill	17 Agricultural Engrg under Other
SUNY A&T Coll-Delhi	6 Agricultural Engrg under Other
SUNY A&T Coll-Farmingdale	14 Photographic Tech under Other
Staten Island Comm Coll	3 Electro-Mech Tech under Electrical
Voorhees Tech Inst	8 Lithographic Tech under Other
Catawba Valley Tech Inst	3 Electro-Mechanical Tech under Electrical
	7 Furniture Drafting under Other
	12 Furniture Production Tech under Other
Fayetteville Tech Inst	5 Environmental Tech under Civil
Rowan Tech Inst	7 Fire and Safety Engrg Tech under Other
Wilkes Comm Coll	3 Agricultural Tech under Other
	5 Agric Equipment Tech under Other
	3 Food Processing Tech under Other
Columbus Tech Inst	2 Metallurgical under Other
Kent St U-Salem	3 Electromech under Electrical
Tri-County Tech Inst	10 Ceramic Tech under Other
U of Akron Comm and Tech	3 Instrumentation Tech under Other
OSU Tech Inst-Okla City	2 Instrumentation under Other
	2 Technical Writing under Other
OSU Tech Inst-Stillwater	16 Fire Protection Tech under Other
	6 Metallurgical Tech under Other
	4 Petroleum Tech under Other
	20 Radiation & Nuclear Tech under Other
Central Oregon Comm Coll	8 Bus Mach Repair under Mechanical
	13 Forestry Tech under Other
Clatsop Coll	7 Business Tech under Other
	10 Forestry Tech under Other
	8 Marine Tech under Other
Mt Hood Comm Coll	1 Radio Production Tech under Electronic
	1 Radio TV Engrg Tech under Electronic
	8 Food Processing Tech under Other
	10 Forestry Tech under Other
Oregon Tech Inst	12 Electro-Mechanical Engrg under Electrical
Dean Inst of Tech	6 Metallurgical Tech under Other
Harrisburg Comm Coll	4 Electro-Mech Tech under Electrical
Montgomery Co Comm Coll	2 Engrg Tech under Other
Pennsylvania St U	12 Materials Tech under Other
	3 Mining Tech under Other
Temple U Tech Inst	1 Metallurgical Tech under Other
	1 Quality Control Tech under Other
Greenville Tech Ed Cntr	13 Textile Tech under Other
Sumter Area Tech Ed Cntr	13 Environmental Engrg Tech under Civil
Chattanooga St Tech Inst	1 Instrumentation Tech under Other
	4 Nuclear Tech under Other
Del Mar Coll	4 Instr Engrg Tech under Other
Grayson Co Coll	1 Radio Tech under Electronic
Lee Coll	1 Instrumentation under Other
San Jacinto Coll	4 Fire Protection & Safety under Other
	2 Instrumentation under Other
South Plains Coll	5 Irrigation Tech under Other
	6 Welding Tech under Other
Wharton Co Jr Coll	6 Agricultural-Chemical Tech under Other
	5 Welding under Other
Vermont Tech Coll	18 Electromechanical Tech under Electrical
Wytheville Comm Coll	6 Environmental Tech under Civil
Green River Comm Coll	20 Forestry Tech under Other
Highline Comm Coll	4 Underseas Tech under Other
Shoreline Comm Coll	1 Quality Control Tech under Other
Skagit Valley Coll	1 Welding under Other
Fairmont St Coll	1 Printing under Other
Kenosha Tech Inst	11 Fluid Power under Mechanical
Milwaukee Area Tech Sch	2 Fluid Power under Mechanical
	6 Metallurgical under Other
	37 Tech Engrg under Other
Milwaukee Sch of Engrg	10 Fluid Power Tech under Mechanical
	4 Metals Tech under Other
NE Wisconsin Tech Inst	10 Instrumentation under Other
Racine Tech Inst	9 Fire Science Tech under Other
W Wisconsin Tech Inst	2 Printing and Publishing under Other
Casper Coll	2 Petroleum Tech under Other

Table 30 Certificates in Technology, by School and Curriculum, 1970-1971

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING, DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
ALABAMA																		
Alabama Inst of Av Tech										10			68			78	0	NA
JM Patterson V-T Sch							22	7		18						47	NA	NA
ARIZONA																		
Arizona Western Coll				6									2	4*		12	0	4
Eastern Arizona Coll				7				6		1			1	2*		17	NA	NA
CALIFORNIA																		
Cabrillo Coll										12						12	0	0
Coll of the Desert				1						1						2	0	0
Diablo Valley Coll								2		2						4	NA	NA
Gavilan Coll								6								6	0	0
Grantham Sch of Engrg										1						1	0	0
Hartnell Comm Coll				4												4	0	NA
Long Beach City Coll	13			10					2		29		4*	33*		91	2	NA
Los Angeles Pierce Coll						14		21		24			17			76	3	NA
Los Angeles Tr-Tech Coll					8			15	34				40			97	0	0
Mt San Antonio Coll	3							3		3	8					17	0	0
San Bernardino Ad V Sch										5						5	0	1
San Diego Comm Coll Dist						2				6		1		10*		19	0	NA
Santa Monica Coll								4		17		22				43	NA	NA
Sierra Coll										2						2	0	0
COLORADO																		
Northeastern Jr Coll						5				3						8	0	0
CONNECTICUT																		
Ward Tech Coll										38						38	0	2
FLORIDA																		
Central Fla Comm Coll								3					4*			7	0	0
Seminole High Sch								14								14	0	0
GEORGIA																		
Athens Tech Sch								12		16			8			36	0	7
Griffin-Spalding V-T Sch										1			3			4	0	0
Lanier Area V-T Sch										3						3	0	0
Moultrie Area V-T Sch								5		9						14	0	2
Swainsboro V-T Sch										10						10	0	0
Troup Area V-T Sch								4		9				32*		45	0	0
Walker Co Tech Sch								20		6						26	0	3
Waycross-Ware V-T Sch										13						13	0	0
IDAHO																		
Idaho St U Sch V-T Ed						15		14	4	14				9*		56	1	0
North Idaho Coll								8		9						17	0	0
Ricks Coll								12		2			1			15	0	0
ILLINOIS																		
Decatur Public Schs							6			7						13	1	1
Industrial Engrg Coll											23					23	0	1
Kennedy-King Coll											5		10			15	0	0
Lewis Coll	25															25	0	0
Olive-Harvey Coll						25*				72	17*			14*		128	NA	NA
U of Illinois-Inst of Av	48									3						51	0	0
INDIANA																		
Valparaiso Tech Inst										22						22	0	0

Table 30 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
IOWA										5						5	0	0
Iowa Western Comm Coll										9			7			16	0	0
Scott Comm Coll																		
KANSAS																		
Kansas Tech Inst	14															14	0	0
KENTUCKY																		
Louisville Tech Inst			2										6			8	0	1
Madisonville Area V Sch									8	5						13	0	0
Somerset Area V-T Sch										5						5	0	0
Tilgham Area V Sch			2													2	0	0
United Electronics Inst										1781						1781	5	NA
LOUISIANA																		
Baton Rouge V-T Sch								5		3				5*		13	0	0
TH Harris V-T Sch						14				22				15*		51	0	1
MAINE																		
Central Maine V-T Inst						11								11*		22	0	0
Eastern Maine V-T Inst				13		24							19			56	0	0
Southern Maine V-T Inst		12		38		25			11	14			10	11*		121	8	0
MASSACHUSETTS																		
Blue Hills Tech Inst						5	3		1*	1						10	0	0
Greater Lawrence Tech							6	1		5						12	0	0
Southeastern Tech Inst								7		7						14	0	0
MICHIGAN																		
Monroe Co Comm Coll				3												3	0	0
Montcalm Comm Coll				16				1						1*		18	0	0
Schoolcraft Coll								1					1			2	0	0
Western Michigan U				5												5	0	0
MINNESOTA																		
Alexandria Area Tech Sch	24							10					7*			41	0	0
Anoka-Ramsey St Jr Coll										9			2			11	0	0
Dunwoody Ind Inst		14	38			14*	8			14			42			130	0	0
Hibbing Area Tech Inst									13	16						29	0	0
Minneapolis Area V-T Sch									42	6						48	0	2
NW Electronics Inst										61						61	0	0
St Cloud Area V-T Sch								30		24						54	0	0
Thief Rv Falls V-T Sch								8		12						20	0	0
Wadena Area Tech Inst						15				20						35	0	0
Willmar Tech Inst								14		12						26	1	0
MISSISSIPPI																		
Pearl River Jr Coll								10		2						12	0	0
MISSOURI																		
Central Missouri St Coll	1	2	3					4		2						12	0	2
David Rankin Tech Inst								13	19	20						52	0	6
Florissant Val Comm Coll						5			3	16			23			47	1	2
Metropolitan Jr Coll Dst				4												4	0	0
SE Missouri St Coll								2		2						4	0	0
MONTANA																		
Miles Comm Coll								1		4			1			6	0	0
Northern Montana Coll				6	4			13	1							24	0	0

Table 30 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
NEBRASKA																		
Centl Nebraska Tech Coll						2		3		2						7	0	0
Nettleton Tech Inst						14										14	0	0
NEW JERSEY																		
Mercer Co Comm Coll								6								6	0	0
Newark Coll of Engrg			12		14*	22			27			12	19			106	1	12E
Ryder Tech Insts								45		510						555	0	NA
Salem Co Tech Inst					6			21	1	12				12*		52	0	0
Somerset Co Tech Inst		8				4		5		5						22	0	0
Warren Co Tech Inst								10		5						15	0	0
NORTH DAKOTA																		
ND St Sch of Science						7		14	7	10						38	0	0
OHIO																		
Cleveland Tech Sch										28			30			58	0	0
Griswold Inst								2		24						26	0	2
ITT Tech Inst-Toledo								15								15	0	0
Tri-County Tech Inst										3	1			2*		6	NA	NA
OREGON																		
Blue Mountain Comm Coll										1						1	0	0
Portland Comm Coll										47						47	0	0
PENNSYLVANIA																		
ATES Tech Sch								11		60						71	0	0
Dean Inst of Tech						24		66	30					12*		132	0	0
Electronics Insts								65		164						229	1	3
Industrial Mgt Inst								37					12			49	1	0
Mastbaum Area V-T Sch														1*		1	0	0
Penn Tech Inst										128						128	0	NA
Philco-Ford Tech Inst									18							18	0	0
Temple U Tech Inst		8	2							2			8	7*		27	0	0
RHODE ISLAND																		
Rhode Island Jr Coll					8					9			24	13*		54	3	NA
R I Radio & Elec Sch										94						94	0	0
SOUTH DAKOTA																		
South Dakota St U								2								2	0	0
TENNESSEE																		
Clarksville Area Tech Sch										2						2	0	0
Greenville Tech Sch										12						12	0	0
TEXAS																		
Amarillo Coll									8							8	0	0
Grayson Co Coll				2												2	0	0
LeTourneau Coll	21															21	0	0
San Jacinto Coll	2	3					6	2		3				13*		29	3E	3E
UTAH																		
Utah Tech Coll-Salt Lake										1						1	0	0
Weber St Coll										16			4			20	0	NA
VIRGINIA																		
Blue Ridge Comm Coll								2								2	0	0
Danville Comm Coll								17		21			14			52	0	1
Virginia Highlands Comm								17		12						29	0	0

Table 30 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
IRGINIA(continued)																		
Virginia W Comm Coll				8												8	0	0
WASHINGTON																		
JM Perry Inst		13		12					27	31			25			108	0	0
LH Bates V-T Inst						12		12	10	6			4			44	5	0
North Seattle Comm Coll									3	20	13					36	0	NA
WISCONSIN																		
ACME Inst of Tech												14				14	0	0
Rice Lake V-T Sch								10								10		
Waukesha Co Tech Inst								6		10			4			20	0	0
W Wisconsin Tech Inst													13			13	0	0
WYOMING																		
Western Wyoming Coll											6					6	0	0
TOTALS:	151	60	59	135	40	259	51	644	269	3654	102	49	433	207	0	6113	36	56

*The following certificates are included under the categories indicated:

Arizona Western Coll	4 Welding Tech under Other
Eastern Arizona Coll	2 Mining Tech under Other
Long Beach City Coll	4 Machine Shop under Mechanical
	4 Petroleum Tech under Other
	29 Quality Control under Other
San Diego Comm Coll Dist	10 Marine Tech under Other
Central Fla Comm Coll	4 Machine Shop Practices under Mechanical
Troup Area V-T Sch	32 Textile Tech under Other
Idaho St U Sch V-T Ed	9 Crop & Soil Tech under Other
Olive-Harvey Coll	13 Environmental Control Tech under Civil
	11 Ind Measurement and Control under Industrial
	14 Paint Tech under Other
Baton Rouge V-T Sch	5 Instrument Tech under Other
TH Harris V-T Sch	15 Nondestructive Test Tech under Other
Central Main V-T Inst	11 Instrumentation Tech under Other
Southern Maine V-T Inst	11 Marine Science under Other
Blue Hills Tech Inst	1 Electro-Mechanical Tech under Electrical
Montcalm Comm Coll	1 Welding under Other
Alexandria Area Tech Sch	7 Fluid Power Tech under Mechanical
Dunwoody Ind Inst	14 Highway Surveying under Civil
Newark Coll of Engrg	1 Plastics Tech under Chemical
Salem Co Tech Inst	12 Scientific Glass under Other
Tri-County Tech Inst	2 Ceramic Tech under Other
Dean Inst of Tech	12 Metallurgical Tech under Other
Mastbaum Area V-T Sch	1 Welding Tech under Other
Temple U Tech Inst	5 Metallurgical Tech under Other
	2 Metallurgy under Other
Rhode Island Jr Coll	13 Instrumentation under Other
San Jacinto Coll	2 Fire Protection and Safety under Other
	11 Printing and Publishing under Other

Table 31 Bachelor's Degrees in Technology, by School and Curriculum, 1970-1971

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
ALABAMA																		
Alabama A & M U						1	1	6	4	13	26			1*		52	2	33
Tuskegee Inst											20					20	1	20
ARIZONA																		
Arizona St U	48							24		44		8		1*		125	NA	NA
DeVry Inst of Tech										28						28	0	0
Northern Arizona U						3		2		5			5			15	0	1
CALIFORNIA																		
Calif St Coll-Long Beach											150					150	NA	NA
Calif St Poly-San Luis		5								24	97	2	7	2*		137	2	0
Electronic Tech Inst										10						10	0	0
Northrop Inst of Tech	122															122	0	0
San Jose St Coll	118										16					134	0	0
COLORADO																		
So Colorado St Coll						6				4	38		7	1*		56	0	2E
FLORIDA																		
+Embry-Riddle Aero U	9															9	0	0
Florida A & M U			1				7				11					19	3	0
U of South Florida							6									6	0	0
GEORGIA																		
Georgia Southern Coll											42			1*		43	0	0
Southern Tech Inst			7			11			7		14		5	3*		47	0	0
ILLINOIS																		
Bradley U						30			16		4		36			86	1	NA
+DeVry Inst of Tech										174						174	NA	NA
Eastern Illinois U											22					22	0	0
Industrial Engrg Coll											13					13	0	0
Southern Illinois U					5	24			31		119		13	7*		199	0	0
INDIANA																		
+Indiana U-Purdue U						15	8		10				19			52	NA	NA
+Purdue U						37	3		75		124		62			301	0	1
Valparaiso Tech Inst										21						21	0	0
KANSAS																		
Kansas St Coll-Pittsburg				70				67		19		13		14*		183	0	NA
Kansas St Teachers Coll											14					14	0	0
KENTUCKY																		
Eastern Kentucky U											39					39	0	0
Western Kentucky U						8			5				3			16	0	0
LOUISIANA																		
Louisiana St U											69					69	0	0
SE Louisiana U											55					55	0	0
Southern U									25				5	5*		35	2	35
MAINE																		
U of Maine														1*		1	0	0
MARYLAND																		
+Capitol Inst of Tech										48						48	0	NA
U of Maryland Ind Ed Dept											64					64	0	2

Table 31 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
MASSACHUSETTS																		
Boston U	2															2	0	0
+Lincoln Coll of NE U						7			21				17			45	0	0
+Lowell Tech Inst						12				3			4			19	0	0
MICHIGAN																		
Central Michigan U											15					15	0	1
Northern Michigan U											19					19	0	0
Western Michigan U	60			42					70		40		58	8*		278	NA	NA
MINNESOTA																		
SW Minnesota St Coll								3		3			7			13	0	0
MISSISSIPPI																		
Mississippi St U									11					7*		18	0	1
MISSOURI																		
Central Missouri St Coll				9				12		19	6		5			51	0	0
Missouri Western Coll								1								1	0	0
SE Missouri St Coll											13					13	0	0
MONTANA																		
Montana St U						21							22			43	0	0
Northern Montnana Coll								8		7						15	0	0
NEBRASKA																		
Kearney St Coll											5					5	0	0
U of Nebraska-Omaha						19					19					38	0	NA
NEW YORK																		
New York Inst of Tech	22								99				52			173	0	NA
NORTH CAROLINA																		
North Carolina St U														13*		13	0	0
OHIO																		
Bowling Green St U											4					4	0	0
Franklin U														16*		16	0	0
Miami U-Oxford											56					56	NA	NA
Ohio U											87					87	0	1
U of Akron Comm & Tech										5			3			8	0	0
+U of Dayton Tech Inst					10					38	23		48			119	0	0
OKLAHOMA																		
OSU Tech Inst-Stillwater	10					8		11		19			19	20*		87	6	2
OREGON																		
Oregon St U						36			6			7	28			77	0	0
+Oregon Tech Inst						40		4	12*	19	34		24			133	7	0
PENNSYLVANIA																		
Pennsylvania St U						31*			87				56			174	0	2
Point Park Coll					4					14			2			20	0	0
Spring Garden Coll						7				25			27			59	0	3
Temple U Tech Inst						1										1	0	0
RHODE ISLAND																		
Brown U						6*										6	0	0

Table 31 (Continued)

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
SOUTH CAROLINA																		
South Carolina St Coll						6							1			7	1	7
TENNESSEE																		
Austin Peay St U											2					2	0	0
East Tennessee St U											60					60	0	0
Memphis St U			13			10		6		4	1	15				49	1	3E
Middle Tennessee St U											6					6	0	0
Tennessee Tech U											68					68	0	1
TEXAS																		
East Texas St U											7					7	0	2
LeTourneau Coll									5				15	1*		21	0	0
Texas A & M U											89			5*		94	NA	NA
+U of Houston						10		11	9	67		17	18	9*		141	9	NA
UTAH																		
+Brigham Young U								22		16	2	21				61	0	0
Utah St U											42					42	0	0
Weber St Coll				15			34			39	2	20				110	2	NA
VERMONT																		
U of Vermont														1*		1	0	0
VIRGINIA																		
Hampton Inst						1				7			2			10	0	8
WASHINGTON																		
Cntl Washington St Coll											7					7	0	0
W Washington St Coll											38					38	0	0
WEST VIRGINIA																		
Bluefield St Coll			1			4			9	5			1			20	0	2
Fairmont St Coll								5		5	1		7			18	0	1
WISCONSIN																		
+Milwaukee Sch of Engrg			4						19				19			42	0	0
Stout St U											176					176	0	1
Wisconsin St U-Platville											51					51	0	2
TOTALS:	**391**	**5**	**26**	**136**	**19**	**354**	**59**	**182**	**521**	**685**	**1810**	**103**	**597**	**116**	**0**	**6004**	**37**	**131**

+Indicates school having at least one technology curriculum accredited at bachelor's degree level by ECPD.
*The following bachelor's degrees are included under the category indicated:

Alabama A&M U — 1 Printing Mgmt Tech under Other
Arizona St U. — 1 Welding Tech under Other
Calif St. Poly-San Luis — 2 Welding Option under Other
So Colorado St Coll — 1 Metals Tech under Other
Georgia Southern Coll — 1 Printing Mgt under Other
Southern Tech Inst — 3 Textile Engrg Tech under Other
Southern Illinois U — 7 Other Engrg Tech under Other
Kansas St Coll-Pittsburg — 3 Printing Management under Other
5 Printing Tech under Other
6 Wood Utilization under Other
Southern U — 5 Printing Tech under Other
U of Maine — 1 Pulp & Paper Tech under Other
Western Michigan U — 8 Metallurgical under Other
Mississippi St U — 7 Marine Engrg Tech under Other

North Carolina St U — 13 Furniture Mfg & Mgt under Other
Franklin U — 16 Engineering Tech under Other
OSU Tech Inst-Stillwater — 1 General Tech under Other
5 Metallurgical Tech under Other
11 Petroleum Tech under Other
3 Radiation & Nuclear Tech under Other
Oregon Tech Inst — 12 Electro-Mechanical Engrg under Electrical
Pennsylvania St U — 24 Water Resources under Civil
Brown U — 6 Urban Tech under Civil
LeTourneau Coll — 1 Welding Tech under Other
Texas A&M U — 5 Engineering Tech under Other
U of Houston — 9 Business Tech under Other
U of Vermont — 1 Agricultural Engrg Tech under Other

Table 32 Post-Baccalaureate Degrees in Technology, by School and Curriculum, 1970-1971

	AIRCRAFT	AIR CONDITIONING	ARCHITECTURAL	AUTOMOTIVE	CHEMICAL	CIVIL	COMPUTER	DRAFTING; DESIGN	ELECTRICAL	ELECTRONIC	INDUSTRIAL	MANUFACTURING	MECHANICAL	OTHER	PRE-ENGINEERING	TOTAL	WOMEN	U.S. NEGRO
KANSAS Kansas St Coll-Pittsburg											25					25	0	0
KENTUCKY Eastern Kentucky U											3					3	0	0
MAINE U of Maine														1*		1	0	0
MARYLAND U Maryland Ind Ed Dept											5					5	0	0
MICHIGAN Western Michigan U											21					21	0	0
MISSOURI Central Missouri St Coll				1				1		2						4	0	0
TENNESSEE Memphis St U								2		2		4				8	0	0
WISCONSIN Stout St U											2					2	0	0
TOTALS:	0	0	0	1	0	0	0	3	0	4	56	4	0	1	0	69	0	0

*U of Maine 1 Pulp and Paper Tech under Other

ENGINEERS JOINT COUNCIL

MEMBER SOCIETIES

American Society of Civil Engineers
American Institute of Mining, Metallurgical and Petroleum Engineers
American Society of Mechanical Engineers
American Society for Engineering Education
Society of Naval Architects and Marine Engineers
American Society for Testing and Materials
American Society of Agricultural Engineers
American Institute of Consulting Engineers
American Society for Metals
Society of Manufacturing Engineers
Society for Experimental Stress Analysis
Instrument Society of America
American Society for Quality Control
American Institute of Industrial Engineers
Society of Fire Protection Engineers
American Institute of Plant Engineers
American Association of Cost Engineers

ASSOCIATE SOCIETIES

Air Pollution Control Association
National Institute of Ceramic Engineers
American Society for Nondestructive Testing
Society of Packaging and Handling Engineers
International Material Management Society
Society of Women Engineers
Society for the History of Technology
Society of American Military Engineers
Western Society of Engineers
Michigan Engineering Society
Louisiana Engineering Society
North Carolina Society of Engineers
Washington Society of Engineers
Engineering Societies of New England
South Carolina Society of Engineers
Los Angeles Council of Engineers and Scientists
Hartford Engineers Club
International Material Management Society (New Jersey Chapter)
Cleveland Engineering Society